# NATIONAL PARK SERVICE PEA RIDGE NATIONAL MILITARY PARK RESOURCES MANAGEMENT PLAN

Recommended by:

Mary C. Davis

\_\_ Date

Cultural Resources Manager

Pea Ridge National Military Park

Approved by:

Stephen E. Adams

Date

Superintendent

Pea Ridge National Military Park

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## Resources Management Plan Pea Ridge National Military Park September 1997

#### INTRODUCTION

#### PARK PURPOSE AND SIGNIFICANCE

Pea Ridge National Military Park was established by an Act of Congress approved July 20, 1956 (70 Stat. 592), to preserve the battle grounds and commemorate the decisive Civil War battle fought here on March 7 & 8, 1862.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when . . . lands hereinafter described . . . and known as the Pea Ridge Battlefield, near Bentonville, Arkansas, shall have been acquired and transferred free and clear of all encumbrances to the United States without expense to the Federal Government, such areas shall be, and are hereby, dedicated and set apart as a unit of the National Park System for the benefit and enjoyment of the people of the United States, under the name of the Pea Ridge National Military Park." (16 U.S.C., 430aa.)

- "Sec. 3. (a) The National Park Service under the direction of the Secretary of the Interior, shall administer, protect, and develop the park, subject to the provisions of the Act entitled "An Act to establish a National Park Service, and for other purposes," approved August 25, 1916 (39 Stat.535), as amended.
- (b) In order to provide for the proper development and maintenance of the park, the Secretary of the Interior shall construct and maintain therein such roads, trails, markers, buildings, and other improvements, and such facilities for the care and accommodation of visitors, as he may deem necessary. (16 U.S.C., 430cc.)"

National Park Service areas are managed "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." The Legislative History indicates that legislative intent is to preserve the battlefield and to commemorate the Battle and those who participated. Deriving from that and the Organic Act, as amended, "The mission of Pea Ridge National Military Park is to preserve the cultural and natural resources therein; to encourage visitation in order to facilitate commemoration, interpretation, and appreciation of the park resources and associated historical events; and to promote resources stewardship through education."

#### RESOURCES MANAGEMENT OBJECTIVES

- · To preserve the battlefield and its integrity.
- · To preserve the historic landscapes.
- · To provide for non-intrusive development of park facilities.
- To provide the research necessary to preserve, maintain, and manage park resources.
- To work with outside agencies and park neighbors to secure greater understanding and acceptance of park resources and activities.
- To restore the historic scene to its 1862 appearance, with concern for the preservation of the historical features of the battlefield.
- To maintain the collection of historic objects related to the interpretive themes of the park.
- · To ensure fire protection for park resources and facilities.
- To participate in regional planning activities.
- To maintain effective working relations with entities such as the Arkansas Department of Parks and Tourism, the Arkansas Game and Fish Commission, the Arkansas Historic Preservation Program, educational institutions, chambers of commerce, and city and county governments.

#### PURPOSE OF THE RESOURCES MANAGEMENT PLAN

A Resources Management Plan (RMP) documents a park's natural and cultural resources, describes and evaluates its current resources management activities, and prescribes an action program based on legislative and executive mandates, NPS management policies, management zoning, and other provisions of related planning documents.

This plan constitutes an update of the 1994 Resources Management Plan and includes a broad scope of research efforts and staff activities which are directed to resources inventory and preservation. A series of specific project statements are presented to address the elements of concern listed in previous documents such as the Master Plan (1963), Development Concept Plan (1983), the revised Statement For Management (1993), and the Strategic Plan.

#### ADMINISTRATION AND MANAGEMENT

Pea Ridge National Military Park is managed under the general direction of the Regional Director, National Park Service, Midwest Regional Office, Omaha, Nebraska, as a component of the National Park System.

The National Military Park encompasses 4,300.35 acres (4,278.75 Fee, 21.60 State ROW; 4,243.95 in the main unit; 56.4 in the detached Federal Earthworks unit):

Historic Zone: approx. 3,446.75 acres of wooded land and

628.00 acres of open field

Development Zone: approx. 204.00 acres for park roads,

administrative buildings, residences, etc.

Special Use Zone: approx. 21.60 acres of highway R.O.W.

#### ADJACENT LAND USE

Lands adjacent to the park are generally small, privately owned farms. Grain crops and livestock production are principal uses. Steep, rocky, forested hillsides are used for timber production. A commercial campground is located about one mile west of the park entrance. Within a mile of the park, 39 percent of the land is used for grazing, 25 percent for cropland/poultry, and 32 percent for woodland. In 1979, there were 300 residences and 13 commercial or industrial establishments within this area, including some commercial development along U.S. 62. Some farmlands are being subdivided for housing developments. Real estate development projects are expanding into such areas as the shore of the Beaver Lake reservoir.

#### CONSULTATION, NATIONAL PARK SERVICE

This document was reviewed by National Park Service resource specialists in the Midwest Regional Office, Denver Water Resources Division, and the Washington Office. Their comments have been incorporated. Selected project statements were also reviewed by resource specialists at Buffalo National River.

CONSULTATION, STATE HISTORIC PRESERVATION OFFICER (SHPO)

This document was reviewed by the Arkansas State Historic Preservation Officer. Her comments have been incorporated.

#### PRESENT STATUS OF RESOURCES

#### NATURAL RESOURCES BASELINE INFORMATION

The final report for the reestablishment of the prairie was submitted in 1980 (Dr. Edward Dale has continued some research on the plot on his own). The University of Arkansas was a good source of researchers during the late 1960's and the 1970's, and research projects were completed on: the taxonomy, reproductive biology, food habits, and range of wild canids (1972); home range, circadian activity and body temperature of the Southern Woodchuck (1974); population densities of small mammals in relation to specific habitat (1971?); ecological succession of

breeding bird populations (1968); white tailed deer reproduction (1971); island game population dynamics (1966); and comprehensive phytosociological analysis of vegetation (1970). Ed Bearss (1962) established a historical vegetation base map based on his research of official Civil War records. General soil data was established in a county-wide soil survey conducted by the US Soil Conservation Service, US Forest Service, and Arkansas Agricultural Experiment Station in 1977. In 1993, the Arkansas Natural Heritage Commission conducted a survey for threatened/endangered species in areas of the park which could be affected by the Vegetation Treatment Plan. In order to insure the protection and proper management of the natural resources, further research is needed to complete, update, and integrate baseline information (see NOO1, Natural Resources Basic Inventory). The park currently has no staff person to competently evaluate the existing data to determine how complete or out of date they are; filling such a position is the number 1 priority of the resources management program (see N-018).

#### NATURAL RESOURCES

#### CLIMATE

The climate is primarily continental, but it has a frequent maritime influence. The summers are warm, accompanied by high humidity. The winters are mild, but temperatures might drop below zero in January. Precipitation averages nearly 45 inches (114 cm) per year. Winters are relatively dry and average 8 to 9 inches (20 to 23 cm) of snow per year. Spring is the wet season, with May the wettest month. Thunderstorms occur throughout the year.

<u>Month</u>	Average Daily <u>High Temperature</u>	Average Daily Low Temperature	Average Total Precip. (in.)
January	47.5	25.1	2.16
February	53.1	28.8	2.64
March	58.6	34.7	3.44
April	71.1	47.0	4.80
May	77.6	54.8	6.27
June	85.1	63.0	5.12
July	90.1	66.6	3.45
August	91.9	65.1	3.48
September	83.2	57.8	4.19
October	73.4	47.5	3.67
November	59.6	35.7	2.82
December	49.7	28.4	2.48
		•	44.61

#### TOPOGRAPHY

The topography is rolling hills and prominent ridges. Elkhorn Mountain is the dominant and highest relief feature (1,610 feet



### United States Department of the Interior



NATIONAL PARK SERVICE PEA RIDGE NATIONAL MILITARY PARK PEA RIDGE, AR 72751 PHONE: (501) 451-8122

IN REPLY REFER TO: N2621

February 11, 1993

#### Memorandum

To:

Associate Regional Director, Resources Management, SWR

Attention: Bob Krumenaker, Division of Natural

Resources Management and Science

From:

Superintendent, Pea Ridge

Subject: Resources management plan consultation

Enclosed is a copy of our **DRAFT** Resources Management Plan. PERI.ZIP files were sent to you separately through CC:MAIL.

Although we realize that the format and software might change as a result of your national RMP work group, nevertheless, since the park has been so long without a decent RMP, we thought this a good time to get your opinion on whether we are headed the right direction with this document. Please share it with Neil Mangum, then let us know where we stand.

If the RMP is ready for a more formal review, let us know what that process now consists of and we will generate a review request memorandum.

In the meantime, if you have any questions, please call me at 501-451-8122.

Stephen E. Adams

# NATIONAL PARK SERVICE PEA RIDGE NATIONAL MILITARY PARK RESOURCES MANAGEMENT PLAN

Recommended by:				
	Stephen E. Adams Superintendent Pea Ridge National	Military	Dark	Date
	-	•		
Approved by:				
-	John E. Cook Regional Director Southwest Region			Date



#### RMP Database Checklist

Park:

PERI

Reviewers: Stephen Fettig and Bob Krumenaker Date: August 6, 1993

#### General Items

Component	Comment
Databases Received and Functional (i.e., files work ok; this is a technical point, not a quality assessment)	Yes
Personnel Table for FY92	Yes
Personnel Table for FY93	No
Codes (issues, compliance, etc.)	Yes

#### Project Statements

Component	Natural	Cultural
Project Statements Exist	Yes	
Titles specific and include action verb	Some	
Subprojects have distinct title and separable actions	See comments	
PS Narratives Complete (stand alone)	Yes	,
Problem Statements describe the nature of the problem and actions taken to date	Yes	
Description of Action explains specific actions that can be done as discrete projects	Mostly, see comments	
Description of Action explains what the budget is being or will be used for	See comments	
Priorities Established; funded=0 and unfunded 1 to x w/o duplicates or missing numbers	Yes	
Funded portions of project statements describe the range of RM actions underway in the park	Yes, see comments	
Funded program accounts for all \$\$ in resource management, including salaries	See comments	

DRAFT

#### John Knox:

The RMP is generally good. Many of our comments are organization-related rather than content-related. To your credit, I found very few spelling errors considering the RMP can't perform a spell-check.

Recognize that many decisions that potentially affect the park will be made at SWRO and WASO with less than complete knowledge of your issues. Therefore making the titles and narratives in the RMP short, sweet, and action oriented will help you.

Putting current actions in many statements is critically important to document your current program. From a look at the RMP (Programming sheet 1 in particular) one might think PERI has 1.5 FTEs doing various natural resource management projects, but the personnel table (TABLE 1) says there are 0.8 FTEs working on natural resource management projects.

A useful and important cross-check can be done by comparing total FTEs for Natural Resources (NR) and Cultural Resources (CR) on Table 1 (NPS RESOURCE PERSONNEL) with the total FTEs on the NR Programming Sheet 1 and the CR Programming Sheet 1, respectively. The number of NR FTEs from the two appropriate tables should be equal, as should the two for CR FTEs. A helpful way to think about this is that FTEs listed in Table 1 (NPS RESOURCE PERSONNEL) must be working on projects with project statements. Reciprocally, all FTEs of funded or partially funded project must be included in Table 1. A common error we all make is that we forget to include the time and cost of program management (often from park base funding) in projects, or we forget to add a project statement for miscellaneous resource management administration (also from park base funding) which is not clearly attributable to any one project.

If PERI needs base funding and FTE increases, as you've suggested in project statement N-018.000, then this request should be linked with OPCALL. Although relatively few base funding and FTE increase requests are achieved through OPCALL, not listing requests through OPCALL will insure that base increases will be extremely unlikely. OPCALL goes out from WASO to regional directors and park superintendents, and therefor frequently slips past many of us in resource management. In the future we all need to me mindful of the importance of OPCALL and use the RMPs as a supporting document for base-funding- and FTE-increase requests.

The following are comments on the overview sections. The underlined titles and pages number refer to places in your draft RMP:



#### Introduction

Page 1: Good summary.

<u>Page 2</u>: This information shouldn't be in the introduction to the RMP. In fact, it doesn't really have a good place in the RMP as outlined in the 1989 guideline. However, if you want it attached to your RMP, then consider making it an appendix.

Page 3: Visitor usage could be summarized in one or two sentences. Detailed visitor information should be kept out of the RMP or put in an appendix. The sub-section "ADMINISTRATION AND MANAGEMENT" should be omitted, or put into an optional executive summary placed before the introduction. Some of the sub-section "PURPOSE OF THE RESOURCES MANAGEMENT PLAN" is good, but in general this sub-section is too generic. Address the idea that the computerized RMP is a way of articulating the specific resource needs and priorities of PERI to the park's own staff, the superintendent, the regional office and the Washington office. In addition, the plan should address the specific strategies or approaches for attempting to achieve the resource objectives, both cultural and natural.

<u>Page 4</u>: The summary of the acreage is useful. The "Introduction" should summarize important legislation relating to the park, restate of the purposes for which the park was established, and list management objectives. The reader should get the message that the management objectives flow directly from the legislative or executive mandates.

#### RESOURCES MANAGEMENT OBJECTIVE

#### Page 4:

- #1) What do you mean by integrity? Biotic integrity? Natural integrity?
- #2) Good.
- #3) Make more specific to PERI. Articulate what sorts of development are not going to conform to NPS policies.
- #4) Consider inserting "understand" before preserve. Consider inserting "natural and cultural" before resources. Consider adding the idea of restoration of extirpated species (e.g., wild turkey).
- #5) Consider inserting "natural and cultural" before resources.
- #6) Consider inserting "and other human created structures" after facilities.



As NPS moves to a more landscape-level management of natural communities and works more with neighboring land management agencies, an objective related to landscape-level management may be helpful. What of an objective to work with other land management organizations? Name the organizations and agencies with which PERI intends to work. Specifically, this view may apply well to managing a regionally high deer population.

Make the objectives specific to PERI. Write them so that they cannot be lifted (without changes) and put into another park's RMP. PERI is a very special place with unique features and its RMP objectives should be site specific. Also, it's important to have objectives that clearly tell us what we will try not do, in addition to the things we will try to do. Otherwise, the tendency is to interpret the objectives as broadly as possible to include almost any new project. One such example for a park (not necessarily a suggestion for PERI) could be: "To minimize development or modification of the landscape in ways that attempt to alter or impair pre-settlement water-flow patterns." Such objectives should come from written NPS policies.

Which objective would encompass protection of night sky qualities?

#### NATURAL RESOURCES BASELINE INFORMATION

<u>Page 5</u>: Give more information. What sort of surveys have been conducted? What sort of maps exist? A summary is good, but a little bit more is needed. Has any air quality, water quality, light pollution monitoring been done? What of historical data on natural resources of special importance, (e.g., fires, floods, farming dates).

#### NATURAL RESOURCES

<u>PAGE 5</u>: Monthly climate conditions are interesting but not important for the RMP. Again, if you want to keep this information with the RMP, then put it in an appendix. The subsection "Natural Resources" should deal with the nature and severity of major threats to the natural resources of the park. When the reader has read this sub-section he/she should be able to understand the major issues in the park.

The format you used in your section "OVERVIEW OF CURRENT PROGRAM AND NEEDS" is very well done. That format could be use (almost exactly) in the sub-section "Natural Resources."

#### SOILS

Page 6: This level of detail could be added to a project statement if the information was need. Otherwise the detail is not need here. A statement on the degree of erosion and the severity of threats to specific resources would be valuable and in accordance with the 1989 guideline.



#### HYDROLOGY

<u>Page 6</u>: Are there any natural resources threatened by human-modified water-related problems. If so, summarize them. Also, water rights issue should be first presented here.

#### AIR QUALITY

<u>Page 7</u>: Is your statement based on a technical study or on staff opinions. If a technical study is your source, then give a citation. If it's a professional opinion, cite the professional.

#### **VEGETATION**

<u>Page 7</u>: What are the threats to the habitats of the park? Are there any besides over-browsing by deer?

#### WILDLIFE

Page 7: Black bears can be a major predator on deer, primarily on very young dear. Considering the high deer populations in the PERI area, it might be very useful (or critical) to know the black bear population. Managing for stable bear numbers might be a method for putting downward pressure on the reproductive success of white-tailed deer in the PERI area. This is something worth asking about.

#### OVERVIEW OF CURRENT PROGRAM AND NEEDS

<u>Page 10</u>: Outline the current program, then address the major issues in an executive summary style. Everything in the two subsections <u>CULTURAL</u> and <u>NATURAL</u> should be moved to "Natural Resources" and "Culture Resources."

#### N04

<u>Page 13</u>: Title doesn't seem to match the text. Perhaps the title should deal with IPM.

#### **80**M

<u>Page 14</u>: This sounds like an integrated project. Consider listed it with other potentially integrated projects.

#### N16

<u>Page 15</u>: Include safe, low-cost, lighting that minimizes light pollution. Over-powerful lighting and light pollution can be a problem even if there is no camping in the park, see the December 27, 1993 memo from the Regional Director. In that memo PERI was asked to prepare a press release during FY92 announcing how the night sky management initiative will carried out at PERI. Text from that press release may be helpful here.

#### N20

<u>Page 15:</u> In the "Natural Resource Baseline Information" sub-section it said the flora baseline "meets minimal level." This point needs clarification if you want a comprehensive flora inventory.



Now for comments on project statements:

N-001.000: Put verb in title. Consider: "Establish Natural Resource-baseline inventory." It might be wise to write out RBI so that the problem statements can be searched on key words, such as "Inventory." Will this project be done in-house or by contract with university folks?

N-002.000: Put verb in title. Consider: "Develop Deer Management Options." Is the herd really resident? Deer are rarely resident in one place year-round. They often have summer or winter ranges. This needs to be studied. Would this work be contracted with a university? What is the 0.5 FTE for? After the initial study, what is the 0.1 FTE for in future years.

N-004.000: If this is a project to examine the potential for Turkey reestablishment, then that should be reflected in the title rather than actual reestablish. Perhaps, N-004.001 should be the draft project statement containing the description of activities, costs, staff time needed for the actual reestablishment effort, once those things are known.

N-005.000: Consider the title: "Clarify Federal Water Rights." One FTE seems high for this project. Would that be one person's time at the regional office for a whole year? Is this a guess, or is it realistic? Omit the last paragraph.

N-006.000: This sounds like a good project for the Challenge Grant/Cost Share program. There are really two related projects here, (1) maintain the current prairie, and (2) establish a prairie at the proper location. Two related project statements would be clearer. Also, is the plan to allow the current prairie to grow-up into forest when the prairie is established at the proper site? If not, make that clear.

N-007.000: Put verb in title. The problem statement seems to suggest more IPM projects than have actions in the "Description of Recommended Activity." If this is the case, then there should be an unfunded budget and the project priority should be non-zero. One project statement could be "Write Integrated Pest Management Plan." A related project statement could deal with PERI's current IPM program. This same project statement should explain what IPM needs are not being met.

N-008.000: Put verb in title. The dollar amounts seem low for the number of FTEs.

N-009.000: Put verb in title. The dollar amounts seem low for the number of FTEs.

N-010.000: Put verb in title.



N-011.000: Consider the title "Control Noxious Weeds." It's my understanding that after a few disturbance-free years the thistles will stop growing in these old fields. In the mean time, mowing seems appropriate. Is this species of thistle not restricted to disturbed habitats?

N-012.000: Consider the title "Write Water Resource Plan." Would this be done in-house or with the help of the Water Resource Division (WRD)? Is the 0.5 FTE for staff time for PERI or WRD or a contractor?

N-013.000: Consider the title "Determine Mineral and Gas Rights." "Federal" can have a lower case "F." Bob: Is "abstracting" company really want they want?

N-014.000: Consider the title "Update Fire Management Plan." What do you mean by "Overpopulation" of cedar trees. If PERI wants to reduce the density of cedars to restore an historic scene and to reduce fuel loads, perhaps there could be an integrated project statement related to this idea.

N-015.000: Put verb in title. Add second servicewide issue code. It's unclear what the current funded activities are. Would the requested funding and 0.2 FTE be for in-house work only? Would you need any external help? Would you need any computer software or special programs for recording backcountry use?

N-016.000: Consider the title: "Address Illegal Dumping."
"Adverse" is an adjective not a noun. Consider using the word
"Undesirable."

N-017.000: Put verb in title. Add second servicewide issue code. Is this research being done in-house, using university people, or though contact with agricultural extension agents.

N-018.000: This project needs to be listed trough OPCALL. Any ideas about what level the job could be classified at? The argument would be strengthen if you added a list of resource management tasks or projects that are not being done for lack of a resource management specialist.



### United States Department of the Interior



#### NATIONAL PARK SERVICE

Southwest Region P.O. Box 728 Santa Fe, New Mexico 87504-0728

caps sent to park

IN REPLYREFER TO: D18(SWR-RCH)

9 SEP 1993

#### Memorandum

To:

Bob Krumenaker, Division of Natural Resources Management, SWR

Subject: Comments on Cultural Resources Components of the RMP for Pea Ridge

From:

Chief, Division of History, SWR

The following are comments submitted by reviewers to Region:

General Comments - Under Compliance Code(s) in the Project Statements should not be listed excluded. Most of these projects will require XXX or 106 consultation.

Pg. 2 - par. 2, <u>Human Use and Impacts</u> - update Visitation for the first three months of CY 1993.

Pg. 9 - par. 1, <u>CULTURAL RESOURCES</u> - Pea Ridge was one of the largest battles fought west of the Mississippi River, however, battles like Westport fought in October 1864, were larger in terms of number of troops.

PERI-C-002.000 - PS Page: 0003 - PROBLEM STATEMENT:
What is the size of the collection?
What type of artifacts are in the collection?, paper?,
metal?, wood?. Please expand on this.

PERI-C-006.000 - PS Page: 0011 - DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

The monuments will be kept in good repair by repointing and cleaning, (per approved method) ......

The trenches will have ......

Removal of vegetation/trees etc., may be harmful to trenches. Do you mean to say that the trenches will be bare dirt? Limit action to raking leaves. Do not disturb rocks/dirt, etc.

PERI-C-007.000 - PS Page: 0014

This project does not mention prairie plots. They need to be discussed.

PERI-C-008.000 - PS Page: 0015

The park ranger is in a position that is designated as historian in the 170 series. That individual must be able to perform the function of a park historian, thus they need to present and write history relevent to the park's resource data needs, otherwise they should be removed from the position.

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United State Bel- Frotes and France no public.

he Interior

Jenni G. Fer



H30(418) T) 16

CPD 11/12/53

#### Memorandum

To:

Regional Director, Southwest Region

Through:

Associate Director, Natural Resources

From:

Associate Director, Cultural Resources

Subject:

Draft Resources Management Plan, Pea Ridge National Military Park

Thank you for giving my office the opportunity to review and comment on the subject draft.

I. Chief Historian Bearss has the following comments:

The narrative should summarize the status of the park's LCS and National Register documentation. Do these reflect comprehensive parkwide survey efforts? While the Cultural Resource Documentation Checklist indicates that the park's National Register and LCS documentation, and its Historic Resource Study, are current and approved, the narrative should discuss these key documents and analyze the potential needs for updating them. For example, it seems likely that as identified needs for archeological research are met, the Register documentation will need to be updated.

Similarly, it seems probable that the 1963 Vegetation Treatment Plan should be reviewed to determine whether it needs updating or revision. The plan suggests that this vegetation plan serves the functions of a Cultural Landscape Report (p. 11); does it reflect current practice in identification and management of cultural landscape values? This RMP would be improved by augmented analysis of needs for coordinating archeological and cultural landscape research with erosion control, the water resources plan and vegetation-related issues such as IPM, fire and hazardous tree management and roadside slope management (pp. 14, 15, 16).

The plan should be explicit about how and why "secondary" features were defined and how treatment priorities are being set (p. 11, PERI-C-006). The park staff should bear in mind that there are those who feel NPS does not adequately demonstate awareness of responsibilities for all properties listed in, or eligible for listing in, the National Register.

Please see additional comments indicated on the attached copy of the draft document.

II. Chief Curator Hitchcock notes that project statement C-002 should address the incomplete cataloging of the collections (ANCS) that was noted in the overview number C03 (p. 10).

III. Chief Anthropologist Scovill notes:

Cultural Anthropology/Ethnography

This document has not been reviewed for cultural anthropology/ethnography program concerns.

#### Archeology

This document was reviewed for archeology program concerns and there were no comments.

IV. Ms. Frondorf, Chief, Planning and Information Branch, Wildlife and Vegetation Division, has compiled the following comments from WASO natural resources divisions:

#### Air Quality Division

The Air Quality Division has reviewed the PERI RMP and has no comments.

#### **Water Resources Division**

The Water Resources Division (WRD) review of this document was limited only to issues relating to the unit's water resources and/or water-dependent environments.

Overall, the water resources aspects of this RMP were handled nicely. The WRD requests that the recommended changes be incorporated into the RMP. Following that, the Water Resources Division recommends approval of this RMP.

#### Introduction

Well-written overview providing appropriate objectives.

#### Natural Resource Baseline Information

(page 6) While not a great deal of existing information is available, this section presently provides appropriate information relating to water resources. As the reviewer is not familiar with PERI, we would like to know if the park contains any wetlands (including riparian zone) resources. If so, information relating to these resources should be provided in this section.

#### Overview of Current Programs and Needs

(page 14) The WRD concurs with the need to evaluate the status of existing water rights and recommends that this be accomplished as a part of the water resources planning activities (PERI-N-012).

#### <u>PERI-N-005.000</u>: Quantification of Federal Water Rights

The Water Rights Branch of the Water Resources Division recommends the elimination of this project statement. The 1978 Presidential Initiative concerning the establishment of Federal water rights is no longer applicable and any Federal need is generally addressed during a basinwide adjudication process.

However, an assessment of the current status of PERI's water rights is appropriate, and it is recommended that this be handled as part of the water resources planning need identified in PERI-N-012.

#### PERI-N-012.000: Water Resources Plan

Suggest that this project title be changed to "Water Resources Management Planning."

Then, under Recommended Activity, the WRD generally recommends the completion of a Water Resources Scoping Report as the first step in the water resources planning activity. The purpose of a Water Resources Scoping Report is to identify existing water resource issues and

management concerns, to overview existing water resources-related information, and then to provide recommended management actions.

At this time, we would recommend revision of this project statement to call for the development of a Water Resources Scoping Report as the initial water resources planning step. In order to accomplish this, we would recommend the modification of the "Recommended Activity" to:

"The initial step in water resources planning would be the completion of a Water Resources Scoping Report. The purpose of this report will be to: (1) briefly describe the water resources and water-dependent environments of the unit and their management status, (2) identify water resources issues affecting the unit, and (3) recommend appropriate management activities for addressing these issues. Included within this report would be an assessment of external water resource threats and an evaluation of any potential impacts from internal operations and development (i.e., addressing drainage from the well house behind the residences)."

The funding requested is appropriate.

If you would like further information on water resources, please contact Mark Flora, Water Resources Division, (303-969-2956).

#### Wildlife and Vegetation Division

#### Natural Resource Baseline Information

This section needs to be expanded to provide a more detailed description of the baseline information available. It says that the baseline information on the soils and flora of the park meets minimal level, but does not describe the information. It should, for example, describe the vegetation surveys conducted in the park, including the date the surveys were conducted, who conducted them and how complete they are. Information on vegetation maps of the park should also be included. This section of the RMP should reference NPS-75, the *Natural Resources Inventory and Monitoring Guideline*.

#### Present Resource Status

Page 13 under N04 Degradation of Park Resources Due to Non-Native Animals: Not all assumed pests are "non-native". Of the pests mentioned (ticks, chiggers, wasps, mice, apple scab, cedar apple rust, bagworms, webworms), the following are native organisms: apple scab, cedar apple rust, fall webworms, and chiggers. Certain species of mice and wasps are native as well, others are not. It should be noted that several of these pests are native and are fungal organisms rather than animals.

PERI-C-007.000: Implement Vegetation Treatment Plan

This should be an integrated ("I") project statement.

<u>PERI-N-001.000:</u> Natural Resources Basic Inventory

The problem statement says that there is practically no baseline information on the natural resources. It should point out that the baseline information on the soils and flora meets the minimal level as stated in the "Natural Resource Baseline Information" section of the PERI RMP. See comments under "Natural Resource Baseline Information" above.

#### PERI-N-002.000: Manage Deer Herd

The park needs to more clearly describe the white-tailed deer problem. The problem statement says that casual observations indicate the herd may be increasing at a rate which could be detrimental to the carrying capacity of the park. Is the problem that the deer herd may be beyond its natural carrying capacity? Is this a valid concern in a park managed for restoration of the historic scene? Has there been any impact on the historic scene? Are browse lines visible on the vegetation? Has forest regeneration been affected? Have there been deer/vehicle collisions? These are the types of information that the project statement should include.

The NPS Inter-Regional White-tailed Deer Team would be happy to assist the park in developing a white-tailed deer management program. If interested, the park should contact Michael A. Coffey, Wildlife Biologist, Wildlife and Vegetation Division, WASO at 202-343-8113.

#### PERI-N-007.000: Integrated Pest Management

The Servicewide Issue Code assigned is NO4: Degradation of Park Resources Due to Non-Native Animals. Not all the pests mentioned are non-native (see comments above under "Present Resource Status"). The project statement should note that several of these pests are native and are fungal organisms rather than animals. Depending on the management zone, native pests may be allowed to function unimpeded or they may be suppressed. Management zones need to be defined prior to deciding upon appropriate pest management actions.

The following comments address the pests mentioned in the project statement.

#### Fungal organisms:

A pest is an organism interfering with the park's management objectives. What are the management objectives for PERI concerning the landscape? A few basic questions come to mind before determining if management actions are warranted. Are the hawthorn and cherry trees part of the cultural landscape? Or are they an installed design? If installed, the park should consider replacing them with less susceptible species for the best long-term management strategy.

Both apple scab and cedar apple rust are considered "native" organisms. In actuality, they are probably as much an accurate component of the historic landscape as the trees the uselves!

**Apple scab:** is a fungal organism, <u>Venturia inequalis</u>. The fruiting structures or conidia may overwinter on twig lesions for two seasons providing an inoculation source for the next season or so.

Cedar apple rust: This fungal organism <u>Gymnosporangium juniperi-virginianae</u>, is indigenous to North America. It can be quite a destructive economic pest in commercial apple growing areas. Some states have initiated legislation for its management.

#### Insects:

**Bagworm:** Believe the bagworm, <u>Thyridopteryx</u> spp. is also a native pest of the U.S. The best management of this pest is to remove the bags (egg sacks) by hand in the winter. In severe populations the bacterial insecticide <u>Bacillus thuringiensis</u> applied at the correct time is very effective. A management plan including the species, location and number of susceptible trees should be defined and assessed on a yearly basis. Management actions may not be needed on all trees.

Fall webworm: <u>Hyphantria cunea</u>, is a native of North America and Mexico. Their damage is usually restricted to the terminal branches, hence they are more of an aesthetic nuisance than a health threat to the tree. There are 1-4 generations recorded per year. The webbed "nests" or area the larvae are currently feeding on can be pruned out. The Park resource management staff should check with their local extension agent to determine the hatch dates of the webworm in their area. This insect is apparent in late summer in the Washington, D.C. area, a time when the host trees are winding down for the season. Hence, defoliation is not a major detriment to tree health.

Health and Nuisance Related Organisms: Mice, chiggers, ticks, and wasps are an integral part of the natural ecosystem. The fact that they are a nuisance and/or health hazard to people is a function of human behavior. To reduce interactions visitors and employees need to be educated on the biology of these animals so they can alter their own behavior and reduce interactions. Efforts should be made to inform visitors/employees of the importance of those organisms in the food web and that all native organisms are protected in the Park.

Stinging Hymenoptera: Wasps and bees posing a health hazard in developed, cultural and recreational zones may be managed with wasp freeze. Approval for the use of wasp freeze should be obtained early in the year so that it is on hand in the Park when needed.

Chiggers and Ticks: Employees and visitors can protect themselves against chiggers and ticks by using personal repellents registered for this use. Informational pamphlets on Lyme disease should be available to park visitors and employees at the visitor center. Broadcast pesticide treatments would not be permitted in the Park.

Mice: There are native mice and non-native mice. Both can be a nuisance depending on the situation. Preventing access to a food and water source incorporated with exclusion techniques are the best methods for preventing mice populations within a structure or in feed bins. The cooperation of the occupants and users of the area is essential. These efforts should be incorporated into the IPM plan.

The following comments apply to the Description of Recommended Project or Activity section of the project statement.

The first paragraph of the Description of Recommended Project or Activity says that "Pesticide application on an annual basis is the most effective way to control these pests." This is incorrect. Pesticide use on an annual basis is not the best management strategy. An IPM plan needs to be devised for the Park which addresses the cultural landscape and the expectations of the site manager. Pesticides may be a part of this IPM plan, but they are certainly not the basis of it.

What documentation supports the statement in paragraph 2 that the tick population is ten times as dense inside the park as outside the park? As stated above personal repellents are the solution to employee and visitor discomfort.

There is no such WASO approved pesticide program as mentioned in the third paragraph. Pesticide requests are to go through the approval process as described in NPS-77, the *Natural Resources Management Guideline*.

Paragraph 4: If the crabapple and hawthorne are part of the cultural landscape and are historically significant, the park may be committed to treatment of these two fungal diseases on an annual basis. Leaf litter and pruned branches should be removed in the fall to reduce inoculum.

The use of <u>Bacillus thuringiensis</u> (Bt) to suppress fall webworm and bagworm populations needs to be accurately timed. Depending on the "two weeks in June" or "during August or September" is simply not accurate enough.

Bt. needs to be applied when the larvae are in the second instar stage. This can be determined by visual observation or by contacting the local extension service on a frequent basis as the season for respective hatch approaches. As stated above, bagworms should be hand removed in the fall or winter to remove the next season's population. This is much more effective than the time and expense spent on yearly spraying! The plan does not state the number of trees in question; extensive numbers would certainly be a consideration in the proposed management strategy.

Additional information on these organisms which may assist the park is attached. If the park has questions regarding these comments or IPM in general they may contact Carol DiSalvo at (202) 343-8116.

#### PERI-N-008.000: Feral and Diseased Animals

The problem statement needs to be expanded to more clearly identify the problems. It says that diseased animals may pose threats to visitor safety, but does not identify the species of animal or the diseases with which the park has experienced problems.

The only problem specifically identified is feral dogs and cats. The recommended activity with regards to feral dogs and cats is to destroy them. Why not capture them and turn them over to the County Animal Control Department? The recommended activity should be expanded to include a public information program to explain to the public why they should not release domestic animals in or near the park. We recommend that this project statement be rewritten.

#### PERI-N-009.000: Soil Erosion

In addition to repair of the erosion, options that may prevent further erosion after the needed repairs have been completed should be addressed. These could include such actions as closure of the trail in wet weather, limiting the number of horses allowed on the trail, relocation of the trail to a less erodible site, etc.

#### PERI-N-017.000: Roadside Slope Management

The recommended activity does not solve the identified problem. The park already knows that vetch is a spreader and invasive exotic and that mowing is needed along the roadside. It does not appear that more research and more planning is needed to solve the problem.

#### PERI-N-018.000 Provide Resources Management Specialist

We agree that the park needs a Natural Resource Specialist and are glad that the park identified this need as the top priority unfunded natural resource need.

#### Attachment



## United States Department of the Interior

TAKE PRIDE IN AMERICA

NATIONAL PARK SERVICE PEA RIDGE NATIONAL MILITARY PARK PEA RIDGE, AR 72751 PHONE: (501) 451-8122

IN REPLY REFER TO: N2621

February 11, 1993

Memorandum

To:

Associate Regional Director, Resources Management, SWR

Attention: Bob Krumenaker, Division of Natural

Resources Management and Science

From:

Superintendent, Pea Ridge

Subject:

Resources management plan consultation

Enclosed is a copy of our **DRAFT** Resources Management Plan. The PERI.ZIP files were sent to you separately through CC:MAIL.

Although we realize that the format and software might change as a result of your national RMP work group, nevertheless, since the park has been so long without a decent RMP, we thought this a good time to get your opinion on whether we are headed the right direction with this document. Please share it with Neil Mangum, then let us know where we stand.

If the RMP is ready for a more formal review, let us know what that process now consists of and we will generate a review request memorandum.

In the meantime, if you have any questions, please call me at 501-451-8122.

Stephen E. Adams

promised comments in March 193.

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# Resources Management Plan Pea Ridge National Military Park January 1993

#### INTRODUCTION

#### PARK PURPOSE AND SIGNIFICANCE

Pea Ridge National Military Park was established by an Act of Congress approved July 20, 1956 (70 Stat. 592), to preserve the battle grounds and commemorate the decisive battle fought here on March 7 & 8, 1862. The battle consisted of two separate actions, one at Leetown and the other at Elk Horn Tavern. It was the largest battle waged west of the Mississippi River and was the largest major Civil War conflict in which American Indians fought. The federal victory at Pea Ridge saved Missouri as part of the Union.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when . . . lands hereinafter described . . . and known as the Pea Ridge Battlefield, near Bentonville, Arkansas, shall have been acquired and transferred free and clear of all encumbrances to the United States without expense to the Federal Government, such areas shall be, and are hereby, dedicated and set apart as a unit of the National Park System for the benefit and enjoyment of the people of the United States, under the name of the Pea Ridge National Military Park." (16 U.S.C., 430aa.)

- "Sec. 3. (a) The National Park Service under the direction of the Secretary of the Interior, shall administer, protect, and develop the park, subject to the provisions of the Act entitled "An Act to establish a National Park Service, and for other purposes," approved August 25, 1916 (39 Stat.535), as amended.
- (b) In order to provide for the proper development and maintenance of the park, the Secretary of the Interior shall construct and maintain therein such roads, trails, markers, buildings, and other improvements, and such facilities for the care and accommodation of visitors, as he may deem necessary. (16 U.S.C., 430cc.)"

National Park Service areas are managed "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

#### GENERAL SITE CHARACTERISTICS

Could marize one of sentences?

#### Adjacent Land Use

Lands adjacent to the park are generally small, privately owned farms. Grain crops and livestock production are principal uses. Steep, rocky, forested hillsides are used for timber production. A KOA campground is located about one mile west of the park entrance. Within a mile of the park, 39 percent of the land is used for grazing, 25 percent for cropland/poultry, and 32 percent for woodland. In 1979, there were 300 residences and 13 commercial or industrial establishments within this area, including some commercial development along U.S. 62. Some farmlands are being subdivided for housing developments. Real estate development projects are expanding into such areas as the shore of the Beaver Lake reservoir.

#### Human Use and Impacts

The park uses the following designations for seasonal use:

Fall	-	September through November	(ca.	28%)
Winter	-	December through February	(ca.	06%)
Spring	_	March through May	(ca.	23%)
Summer	-	June through August	(ca.	43%)

The color change in the Ozarks brings a substantial number of visitors during October. Other seasonal attractions are local arts and crafts fairs which attract heavy visitation to the region. Visitation during winter occurs mainly on the weekends. On warmer days, visitors come to see the white tail deer herd. Spring colors are an attraction. School breaks occur in March and most school field trips take place during Spring. School is out of session in Summer and families are on vacation. This is the season in which most out-of-state visitors arrive.

The heaviest visitation occurs during June, July, August, and October.

The peak year for visitation occurred in 1986 when 131,161 persons visited the park. Visitation over the past ten years has not followed any identifiable trend, although the decrease from 1988 to 1989 is attributable to closure of the tour road for major rehabilitation and the decrease in 1991 is a result of the Gulf War and the generally weak economy. Some minor fluctuations over the years were caused by closure of the park because of snow or ice. The average number of visitors per year from 1982 to 1991 was 107,252. Visitation for the first three months of CY 1992 is up 60% over the same period in CY 1991; this is probably due to a stronger economy, milder weather, a more active interpretive program, and a more assertive "marketing" campaign by both the park and the State.

Most visitors who enter the Visitors Center look at the museum exhibits about the battle. These visitors, about 75% of the annual total, tend to be either new visitors or repeat visitors who are interested in the historical aspects of the park. Based purely on informal observation and staff comments, many local visitors come simply to observe the deer herd.

There are some foot traffic impacts to the Elkhorn Tavern when that resource is open to visitation (summer months).

The tour road receives fairly heavy use by walkers, joggers, and bicyclists, resulting in very little impact.

Use of the hiking trail is low enough that there is little impact.

The greatest adverse impact to a physical resource occurs on the horse trail as the path deepens through use and as erosion accelerates.

The greatest adverse impact to the historic scene, other than roads and traffic, is generated by littering and illegal dumping of trash, refuse, and junk. Additionally, along the park boundary there are several houses whose trash piles have washed onto park property, creating adverse physical and aesthetic impacts.

#### PURPOSE OF THE RESOURCES MANAGEMENT PLAN

A resources Management Plan (RMP) documents a park's natural and cultural resources, describes and evaluates its current resources management activities, and prescribes an action program based on legislative and executive mandates, NPS management policies, management zoning, and other provisions of related plannind documents.

This plan constitutes a major revision of the 1992 Resources Management Plan and includes a broad scope of research efforts and staff activities which are directed to resources inventory and preservation. A series of specific project statements are presented to address the elements of concern listed in previous documents such as the Master Plan (1963), Development Concept Plan (1983), and the revised Statement For Management (1992).

#### ADMINISTRATION AND MANAGEMENT

Pea Ridge National Military Park is managed as a component of the National Park System under the supervision of the Regional Director, National Park Service, Southwest Regional Office, Santa Fe, New Mexico.

an.

on.J

The National Military Park encompasses 4,278.75 acres (4,222.35 in the main unit; 56.4 in the detached Federal Earthworks unit):

Natural Zone: Historic Zone:

approx. 600.00 acres of hay fields approx. 3,453.15 acres of wooded land

Development Zone: approx. 204.00 acres for park roads, administrative buildings, residences, etc

Special Use Zone: approx. 21.60 acres of highway R.O.W.

Park visitation during calendar year 1992 was 117,025. Activities included self-guided auto tour, museum visits and Bi fredements e Bi sperce swhat does this mean "Natural" interpretive programs, special interpretive and commemorative events, hiking, and horseback riding.

RESOURCES MANAGEMENT OBJECTIVES

To preserve the battlefield and its integrity.

To work with the local community to preserve the park and historic landscape.

To provide for non-intrusive development of park facilities.

To provide the research necessary to preserve, maintain, and manage park resources. included received natural & alteral

to understand To work with outside agencies and park neightors to secure greater understanding and acceptance of park resources and activities.

To remove incompatible and asynchronous development from the historic scene, to restore that scene to its 1862 appearance, and to restrict the development of modern facilities with concern for the preservation of the primary historical features of the battlefield.

To maintain the collection of historical objects related to the interpretive themes of the park.

To ensure fire protection for park resources and facilities.

To participate in regional planning activities.

To maintain effective working relations with entities such as the Arkansas Department of Parks and Tourism, the Arkansas Game and Fish Commission, the Arkansas Historic Preservation Commission, the Arkansas Department of Commerce, educational institutions, chambers of commerce, and city and county governments.

to restrict development on manification of the landscape their which attempts to alterns regional and mater flow peterns.

NATURAL RESOURCES BASELINE INFORMATION

PRESENT STATUS OF RESOURCES

Mals ar quality

BASELINE INFORMATION

On the care Baseline information on the soils and flora of the park meets minimal level. However, there is very little baseline information available for the park's fauna and water resources, y). But of Hosper deplere on Natural resources of special important and the baseline information does not meet minimal level (see NOO1, Natural Resources Basic Inventory).

#### NATURAL RESOURCES

CLIMATE

The climate is primarily continental, but it has a frequent maritime influence. The summers are warm, accompanied by high humidity. The winters are mild, but temperatures might drop below zero in January. Precipitation averages nearly 45 inches (114 cm) per year. Winters are relatively dry and average 8 to 9 inches (20 to 23 cm) of snow per year. Spring is the wet season, with May the wettest month. Thunderstorms occur throughout the

<u>Month</u>	Average Daily <u>High Temperature</u>	Average Daily Low Temperature	Average Total <a href="Precip.">Precip. (in.)</a>
January	47.5	25.1	2.16
February	53.1	28.8	2.64
March	58.6	34.7	3.44
April	71.1	47.0	4.80
May	77.6	54.8	6.27
June	85.1	63.0	5.12
July	90.1	66.6	3.45
August	91.9	65.1	3.48
September	83.2	57.8	4.19
October	73.4	47.5	3.67
November	59.6	35.7	2.82
December	49.7	28.4	2.48
			44.61

#### TOPOGRAPHY

The topography is rolling hills and prominent ridges. Big Mountain, also known as Pea Ridge East, is the dominant and highest relief feature (1,610 feet AMSL) in the park; Round Top is another prominent feature.

#### **GEOLOGY**

The park is on the Springfield Plateau, part of the Ozark Highlands. The rock in the area is sandstones and limestones laid down in inland seas that existed here over two million years

ago. Tectonic activity uplifted the sedimentary layers and drained away the seas. Uplift, erosion, and subsequent weathering have produced the present landscape. Part of one of the oldest mountain ranges on the continent (Ozarks), the mountains are very worn. Pea Ridge and Round Top are remnants of once taller mountains. The area, in geological times, will soon be a flat plain, or plateau.

#### SOILS

The soils, mapped by the Soil Conservation Service in 1977, vary with the terrain. In general, Tonti soils are found on ridges, terraces, and stream terraces; Nixa soils occur on ridge tops; and Noark and Clarksville soils are located on steep hill slopes. Secesh and Elsah soils occur on floodplains; Elsah soils occur on floodplains of small streams. Soils in specific areas of the park are identified below:

visitor center - Tonti cherty silt loam, 3%-8% slopes

Winton Spring - Nixa cherty silt loam, 3%-8% slopes Noark cherty silt loam, 20%-45% slopes Tonti cherty silt loam, 3%-8% slopes Elsah, occasionally flooded

Elkhorn Tavern - Nixa cherty silt loam, 3%-8% slopes

Nixa cherty silt loam, 3%-8% slopes
Tonti cherty silt loam, 3%-8% slopes

Secesh gravelly silt loam, occ. flooded
Clarksville cherty silt loam, 12%-50% slopes

The silt loam 3%-8% slopes Detached area - Secesh gravelly silt loam, occ. flooded Nixa cherty silt loam, 3%-8% slopes

Tonti and Nixa soils have only slight limitations for buildings without basements. All the other soils have severe limitations because of slope (Noark and Clarksville soils) or flooding (Secesh and Elsah soils).

#### HYDROLOGY

Intermittent streams dissect the terrain, and some are fed by springs such as the Winton Spring. Little Sugar Creek runs adjacent to the detached area, and the 100-year flood level extends to the bottom of the drainage swale at this site. Groundwater is used as water supply for the park. There are four water-bearing horizons; the deepest two offer the greatest and Set stars for to be plear. most dependable yields.

#### WATER QUALITY

The quality of the waters in the park is unknown.

If a feeling Thes part of taken opinion?

#### AIR QUALITY

Air in the park is of acceptable quality and is not seen as a threat to the park resources.

#### VEGETATION

Forests, cultivated fields, and abandoned fields at different stages of ecological succession are present throughout the park. Big Mountain and Round Top are forested similarly to what was there at the time of the battle, whereas the remainder of the battlefield is less forested today. Tallgrass prairies were once present in the western quarter of the park.

There are no threatened or endangered plants listed for the park.

The park's deciduous forest vegetation varies with site conditions. Overall, the mixed forest type is most extensive. The abandoned fields are tall grasses mixed with shrubs which succeed first into a field dominated by shrubs and shade-intolerant trees, and then to forest. Vegetation at specific areas is described below:

visitor center - landscaped and cultivated fields

Winton Spring area - abandoned fields mixed forest

Elkhorn Tavern - post oak/blackjack oak forest black oak forest

Detached area - abandoned fields
mixed forest
white oak forest
post oak/blackjack oak forest

The cultivated fields are used for growing hay so that an appearance similar to the time of the battle is maintained.

#### Vegetation characteristics are:

Plant <u>Community</u>	Site <u>Conditions</u>	Overstory	<u>Understory</u>	Ground Cover
Post oak/ blackjack oak	dry ridges and uplands	post oak, blackjack oak, black hickory	black hickory, post oak, red cedar	Virginia creeper, tick trefoil
Black oak	slopes	black oak, white oak, sassafras	sassafras, white poplar, flowering dogwood	flowering dogwood, bugbane, summer grape
Mixed	moist areas	white oak, black oak, post oak	winged elm	tick trefoil
White oak	wettest areas	white oak		blueberry
Cedar	outcrops			grasses

#### WILDLIFE

The wildlife species are typical of northwest Arkansas. There are no known endangered or threatened species in the park, but bald eagles occasionally visit the park. Black bear have been seen in the park. Unsubstantiated sightings of cougars have been reported. Pileated woodpeckers are commonly sighted in the park.

The most visible fauna within the park are the numerous whitetail deer. There is a small, resident population of wild turkeys.

Animal populations vary among different habitats represented by the plant communities. For example, the diversity of bird species is high in the fields and forests, and their population numbers are greatest in the forests. The largest numbers of small mammals are found in the cultivated fields.

#### CULTURAL RESOURCES BASELINE INFORMATION

Baseline information on the Battle of Pea Ridge exceeds minimal level, and information on the reconstructed Elkhorn Tavern meets minimal level. Baseline information on ethnographical and archeological resources is very limited and does not meet minimal level.

#### CULTURAL RESOURCES

#### HISTORY AND PREHISTORY

The Civil War Battle of Pea Ridge was fought March 7 and 8, 1862. The battle consisted of two separate actions, one north of Leetown and the other in the Elkhorn Tavern area. It was the largest battle west of the Mississippi River and was the largest Civil War conflict in which American Indians, Cherokees, fought. The Federal victory at Pea Ridge saved Missouri as part of the Union.

Cultural resources at the park include: the Elkhorn Tavern, a rehabilitation of a reconstruction of the original tavern (burned by partisans in late 1862); the Winton Spring house, a structure built from 1904 to 1915; a collection of Civil War era objects; 23 Civil War cannon tubes of several types and sizes; the foundation of a general store from the battle period; sections of historic roads, including the Trail of Tears and the Butterfield Stage Line/Telegraph Road; two commemorative monuments dating from the 1880's; and ten miles of split-rail fence installed in modern times to recreate some fence lines existing at the time of the battle.

Two archeological sites have been located and recorded.

#### CULTURAL CONTEXT/THEME

Trail of Tears Battle of Pea Ridge

#### RESOURCES MANAGEMENT PROGRAM

#### OVERVIEW OF CURRENT PROGRAM AND NEEDS

This section provides the framework for the proposed resources management program for the park. It provides a summary of major issues and those current and long-range strategies to mitigate those problems facing the park. outtine The program in Current Phen in

#### **CULTURAL**

CO1 INADEQUATE PLANNING DOCUMENTS

The park GMP dates from 1963 and is in need of updating and revision. The DCP of 1983 has not been implemented. See Project w Statement C-010.

CO2 INADEQUATE ARCHEOLOGICAL SURVEY & INVENTORY, INCLUDING ARCHEOLOGICAL IDENTIFICATION AND EVALUATION STUDIES, OVERVIEWS & ASSESSMENTS

There has been no overview/assessment and no general archeological survey. Lack of archeological data has made park management incrementally introspective and progressive, resulting in less than comprehensive planning. Lack of specific data collection activities on the complex battlefield has resulted in questionable interpretation of battle activities and location of some prime cultural features. See C-003.

CO3 INCOMPLETE CATALOGING OF MUSEUM COLLECTIONS (ANCS)

Most objects were catalogued under the old, manual system; none have been catalogued on the ANCS. Discovery, in 1993, of a box of artifacts hidden away in the Elkhorn Tavern now requires additional basic cataloging. See C-002.

CO4 NEED FOR ETHNOGRAPHIC OVERVIEWS AND ASSESSMENTS, ORAL HISTORIES AND LIFE HISTORIES

Three regiments of Cherokee Indians fought at the Battle of Pea Ridge under the command of Confederate General Albert Pike. Regiments of Choctaw and Chickasaw Indians were also to have participated in the battle, but did not make the rendevous with There has been no formal communication with these tribes concerning the interpretation of their participation in the battle. The interpretive program has much to gain by acquisition of tribal information and oral history on the Trail of Tears, the Battle of Pea Ridge, and post-Civil War government policy on Indians. See C-012.

CO5 NEED FOR HISTORIC STRUCTURE REPORTS, ASSESSMENTS CONDITION

A HSR was completed for the Elkhorn Tavern but not for the Federal Earthworks. A HSR for the Earthworks is necessary for stabilization and interpretation of these structures. See C-009.

CO6 NEED FOR HISTORIC STRUCTURE PRESERVATION GUIDES

Preservation guides have not been developed for either the Elkhorn Tavern, the Federal Earthworks, or the Pratt store foundation. See C-009.

CO8 NEED FOR HISTORIC RESOURCE STUDIES AND ADMINISTRATIVE HISTORIES

The Administrative History and Legislative History of the park have not been completed. Questions of legislative intent, particularly concerning boundary issues, frequently arise. See C-008.

CO9 NEED FOR COLLECTIONS MANAGEMENT PLANS, COLLECTION STORAGE PLANS, COLLECTION CONDITION SURVEYS

The full range of planning and action is needed for the collection since little has been done in collections management. See C-002.

C12 INADEQUATE PRESERVATION MAINTENANCE PROGRAMS INCLUDING STABILIZATION AND CYCLIC MAINTENANCE

The park's primary historical structure, the Elkhorn tavern, has been inadequately preserved through routine and cyclic maintenance. The tavern is due for a major rehabilitation project in the Spring of 1993. Secondary historical features, such as cannons and fences, have suffered from a lack of maintenance due to funding shortages. See C-006.

C13 NEED FOR REHABILITATION OR RESTORATION OF HISTORIC AND PREHISTORIC STRUCTURES, AND CULTURAL LANDSCAPES

The Vegetation Treatment Plan (1963) is, basically, a Cultural Landscape Plan. It has been partially implemented over the past 30 years but still has major portions remaining to be implemented; this involves allowing some open areas to revert to forest, removing trees in some areas to recreate open space, and building more rail fence to represent fence rows existing at the time of the battle and to define physical locations of conflict areas. See C-004, C-005, and C-007.

### C15 NEED FOR CONSERVATION TREATMENT OF MUSEUM OBJECTS

Most objects are fairly stable. Some objects require conservation cleaning and some require conservation stabilization or treatment. See C-002.

## C16 INADEQUATE STORAGE AND ENVIRONMENTAL CONTROLS FOR MUSEUM OBJECTS

The collection is stored in a small, dedicated space. However, there is no work room or environmental control. There is not sufficient space for the collection to grow, and some items are separated from the dedicated space because it is too small to hold all the objects. See C-002.

## C22 THREATS TO CULTURAL LANDSCAPES AND VIEWSHEDS FROM BEYOND PARK BOUNDARIES

Northwest Arkansas is the fastest growing part of the state. Housing and small businesses represent incremental development near and by the park. As this growth continues, the historic scene and viewshed, particularly at the Leetown battle site, are increasingly threatened. There is a need to formally study these threats and to develop solutions such as purchase of development rights on neighboring tracts. See C-010.

### C23 CONFLICTING PARK MANAGEMENT AND DEVELOPMENT ACTIVITIES

The horse trail was informally established in the 1970's as a measure to control the use of park lands by horse riders. This trail is unrelated to interpretation of the battle; it is purely recreational. Through the years, significant damage to the resource has occurred through soil erosion and serrendipitous visitor modification of the trail. Additionally, the erosion has presented safety hazards which cannot be abated without the application of human and monetary resources; these resources are unavailable. Feasible alternatives include closure of the trail or substantial user fees to pay for its upkeep. See C-013.

### C24 INSUFFICIENT PROFESSIONAL STAFF

Cultural resources management responsibilities are split between the Superintendent, the Chief of Maintenance, and the Chief Ranger. Consequently, there is little comprehensive planning and virtually no process continuity. The current Superintendent is the only park employee with CRM training and experience; his management duties do not allow sufficient time for the CRM process. Other staff do not have adequate academic training or experience to perform the CRM at an appropriate level. See C-014.

### C25 NEED FOR CRM-RELATED TRAINING

The general staff does not have sufficient orientation to CRM. Consequently, support of the program, in all operational phases, is not what it should be. The current Superintendent plans to provide basic CRM orientation in order to promote the necessary support. See C-015.

### C26 OTHER

Federal Highway 62 runs through the southern portion of the park, and the State owns the highway roadbed. This highway is scheduled to be expanded to four lanes by 1997. If expanded in its current location, the adverse impacts which already exist would be expanded tremendously and the integrity of the park would be severely compromised. The park has been exploring alternatives to the current location, and has had some cooperation from the State highway department in that regard. See C-011.

### NATURAL

NO1 DEGRADATION OF PARK RESOURCES DUE TO NATIVE ANIMAL SPECIES OVERPOPULATION

The park has a large herd of white-tail deer. State game officials, in the past, have assumed that the herd is too large to be supported by the available resources. There is insufficient information to state, with any certainty, whether the herd is degrading the resources. The assumption of degradation is also a contributing factor to the poaching problem in the park. Without adequate data, the park must hold to the "No Action" alternative for managing the herd. See N-002.

NO2 IMPACTS ON THREATENED, ENDANGERED, AND OTHER SENSITIVE ANIMALS

Wild turkeys, indigenous to the area, were decimated through habitat destruction and overhunting. A small population has reestablished itself within the park. There is virtually no data on these animals, therefore, there is no guidance for management to protect and manage the population. See N-004.

NO4 DEGRADATION OF PARK RESOURCES DUE TO NON-NATIVE ANIMALS

Park IPM issues include control of ticks, chiggers, wasps, mice,
Apple Scab, Cedar Apple Rust, bagworms, and webworms. Feral dogs
and cats harass/kill wildlife. Diseased animals, primarily wild,
sometimes pose threats to visitors and staff. See N-007 & N-008.

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NO6 DISRUPTION OF NATIVE PLANT COMMUNITIES AND ACCELERATED EROSION DUE TO PAST LAND PRACTICES

The open fields in the park are leased to local ranchers/farmers for production of hay (to maintain the open areas of the battlefield). Agricultural practices and length of use have led to small areas of erosion. The horse trail use has caused accelerated erosion within field and forest areas. Some areas of the park, such as the prairie restoration plot, have not been converted to their appropriate vegetation regimes. See N-009 and C-007.

### NO7 DISRUPTION OF NATURAL FIRE REGIMES

The park has practiced control of all wildland fire. Consequently, natural fire regimes have been effectively eliminated resulting in fuel loading and disruption of natural vegetation regimes and succession. There is a need for a Fire Management Plan (FMP) which addresses both suppression of wildfire and the use of Management Ignited Prescribed Fire (MIPF). The use of MIPF will allow the long process of controlling the over-population of juniper (colloquially, the eastern red cedar) and the restoration of the hardwood oakhickory forest that predominated at the time of the Battle of Pea Ridge. The FMP is currently being developed by the Fire Management Officer at Buffalo National River. See N-014 and C-007.

### NO8 LOSS OF CULTURAL LANDSCAPES

The primary loss of cultural landscape through natural processes is the over population of juniper trees. There has been some loss of cultural landscape through the introduction of a prairie restoration plot in the early 1970's, expanded in 1991. The plot is located in an area that was heavily wooded at the time of the battle; the heavy vegetation of the time contributed to the confusion which resulted in the capture of several high ranking Confederate officers. Thus, the plot adversely affects one of the important interpretive stories. The prairie mentioned in the battle reports was actually located about a mile northwest of the plot; re-establishment of the prairie in its proper location is a desirable project and should be planned as part of the implementation of the Vegetation Treatment Plan. See N-006 and C-007.

### N13 LACK OF SECURE WATER RIGHTS

The rights to the surface and ground waters within the park are unknown. The rights need to be legally described and established so that management will have parameters within which to work and to protect the sources and resources. See N-005.

N16 VISUAL AND BIOLOGICAL IMPACTS OF URBANIZATION AND OTHER NEAR-PARK DEVELOPMENT ON PARK RESOURCES

Many of the residences near and by the park have their own trash dumps. Material from these dumps, and surface water passing through them, can and do migrate/flow onto the park, with unknown impacts to flora, fauna, and water resources. Aesthetically, the dumps are very intrusive and reflect very negatively on the image of the park. As the area develops, more houses and businesses are built near/by the park, resulting in more source points. Until a more formal process is researched and established, the park contacts individual home owners to enlist their aid in helping the park by cleaning up their dumps; this has met with some success. See N-016.

N18 VISITOR USE IMPACTS ON BACKCOUNTRY PARK RESOURCES

Currently, use of the backcountry is not controlled, measured, or lighty therefore the impacts of this use are

managed in any formal way, therefore, the impacts of this use are unknown. A Backcountry Management Plan is needed to begin to resolve this issue. See N-009, N-015, and C-013.

N20 LACK OF BASIC DATA: INSUFFICIENT UNDERSTANDING OF PARK ECOSYSTEMS AND THREATS TO THEM

Although there have been studies conducted on specific natural resources, comprehensive base data on park flora and fauna is not available to support management action conderning their status, needs, and requirements. See N-001. But you staid Flore is up to mining I eval in

N24 OTHER ISSUES

There are approximately 3,700 acres of forest in the park. With NR. B. I. this many trees, there are, naturally, many trees which are considered hazardous to visitors or staff because of the lack of physical integrity and the susceptibility to breakage and/or Such trees in high use areas are managed through the hazardous tree program. The hazardous tree plan needs to be reviewed and revised as necessary to support replacement of trees removed for safety reasons; this review should include replacement species by vegetative species unit, cost factors, and funding/acquisition sources. See N-010.

Until federal water rights are established, the park's water resources should be managed according to a formal plan. See N-012.

Federal mineral and gas rights within the park have not been established or described in a central location (if at all). Protection and management of these resources will remain superficial until rights have been quantified. See N-013.

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The park tour road contains some areas of steep slope. The steep slopes obviate mowing by equipment, forcing hand reduction of the biomass (mainly grasses). An informal experiment by the park in the past has shown that alternative ground cover can reduce the number of cuttings required. Potential savings of scarce fiscal resources makes further alternative ground cover research attractive. See N-017.

There is no person currently on the staff with formal academic training in natural resources management. With the natural resources existing within the park, and their effects on the historic landscape, it is crucial to have someone with NRM skills as part of the management team to insure the proper management and protection of those resources. See N-018.

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TABLE 1
NPS RESOURCE PERSONNEL
(current year only)

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3 TYPE OF NPS EMPLOYEE 3		RESOURCES		
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3Research Scientists	0.0	0.0	0.0 3	
3			3	
3Resources Specialists	0.0	1.0	1.0 3	
3			3	
3025 Park Rangers Res Mgmt	0.2	0.0	0.2 3	
3			3	
3025 Park Rangers Res Prot	0.4	0.4	0.8 3	
3			3	
3025 Park Rangers Res Interp	0.0	0.5	0.5 3	
3			3	
3Maintenance Personnel	0.2	0.0	0.2 3	
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3Total of RES Personnel	/0.8/	(1.9)	2.7 3	
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3PERCENT	6.9%	16.4%	23.3% <i>3</i>	
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02/10/93 14:10:16 TABLE 2

NATURAL AND CULTURAL

CURRENT YEAR FUNDING

(\$ in thousands - by activity type)

Page: 001 FY: 93

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<i>3</i> ROTH		19.0		0.0		19.0		0.0		0.0		0.0		0.0	3
3PCR1		14.0		1.0		13.0		0.0		0.0		0.0		0.0	3
<i>3</i> P0F1		18.5 <sub>/</sub>		6.0		10.5		0.0		0.0		0.0		2.0	3
3PNR1		26.0		9.0		1.0		0.0		16.0		0.0		0.0	3
<i>3</i> PSPA		1.0		0.0		1.0		0.0		0.0		0.0		0.0	3
<i>3</i> SFIR		5.0		0.0		0.0		0.0		5.0		0.0		0.0	3
3NVOL		0.0		0.0		0.0		0.0		0.0		0.0		0.0	-
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# PROGRAMMING SHEET 1 CULTURAL CURRENT YEAR FUNDED ACTIVITIES (\$ in thousands)

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3004.000 3 3	REMOVAL OF WINTON SPRING HOUSE	÷	STRC	C13	RG-NR-OTH	MIT	19.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	19.0	0.13
3006.000 3 3 3	PRESERVE AND MAINTAIN SECONDARY HISTORIC RESOURCES		COMB	C12	PARK-CR	MIT	12.0	0.5	12.0	0.5	12.0	0.5	0.0	0.0	36.0	1.53 3 3
3007.000 3 3 3	IMPLEMENT VEGETATION TREATMENT PLAN		CULL	C13	PARK-CR	MIT	1.0	0.1	1.0	0.1	1.0	0.1	0.0	0.0	3.0	0.33 3 3
3008.000 3 3	HISTORICAL RESEARCH	135		C08	PARK-CR	RES	1.0	0.1	1.0	0.1	1.0	0.1	1.0	0.1	4.0	0.43
3013.000 3 3	RESOLVE HORSE TRAIL ISSUE		CULL	C18 C23	PKBASE-OT	RES	3.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.13
3015.000 3	STAFF CRM TRAINING		COMB	C25	PKBASE-0T	ADM	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.13
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PROGRAMMING SHEET 2 CULTURAL UNFUNDED ACTIVITIES (\$ in thousands)

Page: 001 FY: 93 PARK: PERI

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PROJECT 3PROJECT TITLE 3PKG3CULT3SYSTEM-3FUNDING 3ACT3CUPPENT YEARS OUTVEAR 1 2 OUTVEAR 2 2

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31 3 3	010.000	BOUNDARY/RESOURCE STUDY	163	CULL	C10	C17	RG-NR-OTH	RES	30.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.83
32 3 3	011.000	RELOCATE HIGHWAY 62		CULL	. C17	C13	ST-LOCAL	MIT	4000.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4000.0	0.03
33 3 3 3	001.000	PROVIDE PRESERVATION GUIDE FOR ELKHORN TAVERN		STRC	C06		REGN-CR	PRC	3.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.13
34 3 3	009.000	HSPG, FEDERAL EARTHWORKS	238	COMB	C06	C13	CRPP	RES	10.0	0.3	10.0	0.3	0.0	0.0	0.0	0.0	20.0	0.63
35 3 3 3	006.000	PRESERVE AND MAINTAIN SECONDARY HISTORIC RESOURCES		COMB	C12		REGN-CR	MIT	12.0	0.5	12.0	0.5	12.0	0.5	12.0	0.5	48.0	2.03
36 3	003.000	ARCHEOLOGICAL RESEARCH	114	COMB	C02	-	RG-NR-OTH	RES	30.0	0.5	30.0	0.5	0.0	0.0	0.0	0.0	60.0	1.03
3	712.000	ETHNOGRAPHIC OVERVIEW & ASSESSMENT	238	ETHN	C04		RG-NR-OTH	RES	50.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	3 1.03 3 3
38 3 3	002.000	PRESERVATION AND PROTECTION OF THE COLLECTION		08JC	C16		CONSTR NWASO-OTH	PRO RES	20.0 30.0	0.1 0.7	0.0	0.0	0.0	0.0	0.0	0.0	20.0 30.0	3 0.13 0.73
3							Subtotal		50.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.83
39 3 3	014.000	PROVIDE SUFFICIENT CRM STAFF		COMB	C24		PARK-CR	ADM	20.0	0.5	20.0	0.5	20.0	0.5	20.0	0.5	80.0	2.03
310 3 3 3	007.000	IMPLEMENT VEGETATION TREATMENT PLAN		CULL	C13		RG-NR-OTH	MIT	5.0	0.1	5.0	0.1	5.0	0.1	5.0	0.1	20.0	0.43
311 3 3 3	005.000	PLACE OVERHEAD UTILITY LINES UNDERGROUND	134	CULL	C13		NWASC-OTH	MIT	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	3 0.03 3 3
312 3	008.000	HISTORICAL RESEARCH	135		C08		PARK-CR	RES	10.0	0.3	10.0	0.3	0.0	0.0	0.0	0.0	20.0	3 0.63 3
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# PROGRAMMING SHEET 1 NATURAL CURRENT YEAR FUNDED ACTIVITIES (\$ in thousands)

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PARK: PERI REGION:

	DBDDDDDDDDDDDDDDDDDD GPROJECT TITLE	3PKG3CULT	3SYSTEM	-3FUNDING	3ACT3	CURRENT	YEAR3	OUTYEA	AR 1 3	OUTYEA	AR 2 3	OUTYE	AR 3 3	IDDDDDDDD Tota	NL 3
3	3 3	3NUM3RES 3 3TYPE	SISSUE	3SOURCE 3 -	3TYP3	1990 \$\$	3 FTE3	1994 \$\$	FTE3	1995	FTE3	199	6 3 FTE3	**	3
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	MAINTENANCE OF TALL GRASS PRAIRIE	CULL	N08	PARK-NR	MIT	0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0	1.0	0.13 3 3
3007.000 3 3	INTEGRATED PEST MANAGEMENT		N04	PARK-NR	MIT	1.0	0.1	1.0	0.1	1.0	0.1	0.0	0.0	3.0	0.33 3 3
3008.000 3 3	FERAL AND DISEASED ANIMALS	ı	N04	PKBASE-OT	MIT	0.5	0.1	0.5	0.1	0.5	0.1	0.0	0.0	1.5	0.33 3 3
3009.000 3	SOIL EROSION	CULL	N06	SPECIAL-\$	MIT	1.0	0.1	1.0	0.1	1.0	0.1	0.0	0.0	3.0	0.33
3010.000 3 3 3	HAZARDOUS TREES IN HIGH VISTOR USE AREAS		N24	PKBASE-OT	MIT	10.0	0.2	5.0	0.1	5.0	0.1	0.0	0.0	20.0	0.43
3014.000 3 3	FIRE MANAGEMENT	CULL	N07	PARK-NR FIRE	PRO PRO	12.0 5.0	0.3	0.0	0.0	0.0	0.0 0.0	0.0	0.0 0.0	12.0 5.0	0.33 0.13
3				Subtotal		17.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	17.0	0.43
.000	BACKCOUNTRY MANAGEMENT PLAN	CULL	N18	PKBASE-OT PARK-NR	RES RES	2.0 4.0	0.1 0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.0 4.0	0.13 0.13
3				Subtotal		6.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.23
3016.000 3 3	CONTROL ILLEGAL DUMPING	CULL	N16	PARK-NR	PRO	4.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.2 <i>3</i> <i>3</i>
	ROADSIDE SLOPE MANAGEMENT	CULL	N24	PKBASE-0T	RES	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3 0.13 3
•	PROVIDE RESOURCES MANAGEMENT SPECIALIST		N24	PKBASE-OT	ADM	1.0	0.1	1.0	0.1	1.0	0.1	1.0	0.1	4.0	3 0.43 3
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	ects printed			· ·	_			· · · · · · · · · · · · · · · · · · ·							3
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PROGRAMMING SHEET 2
NATURAL
UNFUNDED ACTIVITIES
(\$ in thousands)

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PARK: PERI REGION:

1114	I3NUMBER 3	3	3NUM31		3ISSUE	-3SOURCE -3	3TYP3		3 FTE3	\$\$	3 FTE3	\$\$	3 FTE <i>3</i>	\$\$	3 FTE3	**	
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0	017.000	ROADSIDE SLOPE MANAGEMENT	(	CULL	N24	VOL-INDEP	RES	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1	018.000	PROVIDE RESOURCES MANAGEMENT SPECIALIST			N24	NR-I&M	ADM	49.0	0.9	49.0	0.9	49.0	0.9	49.0	0.9	196.0	3.
2	015.000	BACKCOUNTRY MANAGEMENT PLAN	(	CULL	N18	PARK-NR	RES	5.0	0.2	0.0	0.0	0.0	,0.0	0.0	0.0	5.0	0.
3	001.000	NATURAL RESOURCES BASIC INVENTORY			N20	RG-NR-SCI	RES	30.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	1.
•	005.000	QUANTIFICATION OF FEDERAL WATER RIGHTS			N13	WATER RES	RES	30.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	1.
	013.000	FEDERAL MINERAL & GAS RIGHTS	238 0	ULL	N24	ENER-MIN	RES	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.
	012.000	WATER RESOURCES PLAN	155		N24 N12	WATER RES	RES	25.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.
	002.000	MANAGEMENT OF DEER			N01	RG-NR-SCI	RES	15.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.
		HERD				PARK-NR	MIT	0.0	0.0	1.0	0.1	1.0	0.1	1.0	0.1	3.0	0
						Subtotal		15.0	0.5	1.0	0.1	1.0	0.1	1.0	0.1	18.0	0.
	004.000	RE-ESTABLISH WILD TURKEY			N02	RG-NR-SCI PARK-NR	RES MIT	10.0	0.3	0.0	0.0	0.0	0.0 0.1	0.0 0.5	0.0	10.0 1.5	0.
						Subtotal		10.0	0.3	0.5	0.1	0.5	0.1	0.5	0.1	11.5	0.
	011.000	CONTROL OF NOXIOUS WEEDS			N05	RG-NR-RM	MIT	3.0	0.1	3.0	0.1	3.0	0.1	3.0	0.1	12.0	0.
	10 proje	ects printed															

93 10 6/18/93

### PROJECT LIST

Page: 0001

PRIORITY	PROJECT NUMBER	YEAR	PROJECT TITLE SUB-T	TITLE FUNDED	UNFUNDED
0	PERI-C-004.000	93	REMOVAL OF WINTON SPRING HOUSE	19.00	0.00
. 0	PERI-C-013.000	93	RESOLVE HORSE TRAIL ISSUE	3.00	0.00
0	PERI-C-015.000	93	STAFF CRM TRAINING	1.00	0.00
1	PERI-C-010.000	93	BOUNDARY/RESOURCE STUDY	0.00	30.00
2	PERI-C-011.000	93	RELOCATE HIGHWAY 62	0.00	4000.00
3	PERI-C-001.000	93	PROVIDE PRESERVATION GUIDE FOR ELKHORN TAVERN	0.00	3.00
4	PERI-C-009.000	93	HSPG, FEDERAL EARTHWORKS	0.00	20.00
5	PERI-C-006.000	92	PRESERVE AND MAINTAIN SECONDARY HISTORIC RESOURCES	48.00	48.00
6	PERI-C-003.000	93	ARCHEOLOGICAL RESEARCH	0.00	60.00
7	PERI-C-012.000	93	ETHNOGRAPHIC OVERVIEW & ASSESSMENT	0.00	50.00
8	PERI-C-002.000	93	PRESERVATION AND PROTECTION OF THE COLLECTION	0.00	50.00
9	PERI-C-014.000	93	PROVIDE SUFFICIENT CRM STAFF	0.00	80.00
10	PERI-C-007.000	92	IMPLEMENT VEGETATION TREATMENT PLAN	4.00	20.00
11	PERI-C-005.000	92	PLACE OVERHEAD UTILITY LINES UNDERGROUND	0.00	· 20.00
12	PERI-C-008.000	93	HISTORICAL RESEARCH	4.00	20.00
0	PERI-N-006.000	92	MAINTENANCE OF TALL GRASS PRAIRIE	2.00	0.00
0	PERI-N-007.000	92	INTEGRATED PEST MANAGEMENT	4.00	0.00
0	PERI-N-008.000	92	FERAL AND DISEASED ANIMALS	2.00	0.00
0	PERI-N-009.000	92	SOIL EROSION	4.00	0.00
0	PERI-N-010.000	92	HAZARDOUS TREES IN HIGH VISTOR USE AREAS	35.00	0.00
0	PERI-N-014.000	93	FIRE MANAGEMENT	17.00	0.00
0	PERI-N-016.000	93	CONTROL ILLEGAL DUMPING	4.00	0.00
0	PERI-N-017.000	93	ROADSIDE SLOPE MANAGEMENT	1.00	0.00
1	PERI-N-018.000	93	PROVIDE RESOURCES MANAGEMENT SPECIALIST	4.00	196.00
2	PERI-N-015.000	93	BACKCOUNTRY MANAGEMENT PLAN	6.00	5.00
. 3	PERI-N-001.000	93	NATURAL RESOURCES BASIC INVENTORY	0.00	30.00
4	PERI-N-005.000	92	QUANTIFICATION OF FEDERAL WATER RIGHTS	0.00	30.00
5	PERI-N-013.000	93	FEDERAL MINERAL & GAS RIGHTS	0.00	5.00
6	PERI-N-012.000	93	WATER RESOURCES PLAN	0.00	25.00
7	PERI-N-002.000	<b>9</b> 2	MANAGEMENT OF DEER HERD	0.00	18.00
8	PERI-N-004.000	92	RE-ESTABLISH WILD TURKEY	0.00	11.50
9	PERI-N-011.000	92	CONTROL OF NOXIOUS WEEDS	0.00	12.00
Park Sub-	total			158.00	4733.50
Grand Total	al======	=====		=======================================	4733.50

32 projects printed

6/18/93

193

24

PROJECT LIST

Page: 0001

PRIORITY	PROJECT NUMBER	YEAR	PROJECT TITLE SUB-TITLE	FUNDED	UNFUNDED
3	PERI-C-001.000	93	PROVIDE PRESERVATION GUIDE FOR ELKHORN TAVERN	0.00	3.00
8	PERI-C-002.000	93	PRESERVATION AND PROTECTION OF THE COLLECTION	0.00	50.00
6	PERI-C-003.000	93	ARCHEOLOGICAL RESEARCH	0.00	60.00
0	PERI-C-004.000	93	REMOVAL OF WINTON SPRING HOUSE	19.00	0.00
11	PERI-C-005.000	92	PLACE OVERHEAD UTILITY LINES UNDERGROUND	0.00	20.00
5	PERI-C-006.000	92	PRESERVE AND MAINTAIN SECONDARY HISTORIC RESOURCES	48.00	48.00
10	PERI-C-007.000	92	IMPLEMENT VEGETATION TREATMENT PLAN	4.00	20.00
12	PERI-C-008.000	93	HISTORICAL RESEARCH	4.00	20.00
4	PERI-C-009.000	93	HSPG, FEDERAL EARTHWORKS	0.00	20.00
1	PERI-C-010.000	93	BOUNDARY/RESOURCE STUDY	0.00	30.00
2	PERI-C-011.000	93	RELOCATE HIGHWAY 62	0.00	4000.00
7	PERI-C-012.000	93	ETHNOGRAPHIC OVERVIEW & ASSESSMENT	0.00	50.00
0	PERI-C-013.000	93	RESOLVE HORSE TRAIL ISSUE	3.00	0.00
9	PERI-C-014.000	93	PROVIDE SUFFICIENT CRM STAFF	0.00	80.00
0	PERI-C-015.000	93	STAFF CRM TRAINING	1.00	0.00
3	PERI-N-001.000	93	NATURAL RESOURCES BASIC INVENTORY	0.00	30.00
7	PERI-N-002.000	92	MANAGEMENT OF DEER HERD	0.00	18.00
8	PERI-N-004.000	92	RE-ESTABLISH WILD TURKEY	0.00	11.50
4	PERI-N-005.000	92	QUANTIFICATION OF FEDERAL WATER RIGHTS	0.00	30.00
0	PERI-N-006.000	92	MAINTENANCE OF TALL GRASS PRAIRIE	2.00	0.00
0	PERI-N-007.000	92	INTEGRATED PEST MANAGEMENT	4.00	0.00
. 0	PERI-N-008.000	92	FERAL AND DISEASED ANIMALS	2.00	0.00
0	PERI-N-009.000	92	SOIL EROSION	4.00	0.00
0	PERI-N-010.000	92	HAZARDOUS TREES IN HIGH VISTOR USE AREAS	35.00	0.00
9	PERI-N-011.000	92	CONTROL OF NOXIOUS WEEDS	0.00	12.00
6	PERI-N-012.000	93	WATER RESOURCES PLAN	0.00	25.00
5	PERI-N-013.000	93	FEDERAL MINERAL & GAS RIGHTS	0.00	5.00
0	PERI-N-014.000	93	FIRE MANAGEMENT	17.00	0.00
2	PERI-N-015.000	93	BACKCOUNTRY MANAGEMENT PLAN	6.00	5.00
0	PERI-N-016-000	93	CONTROL ILLEGAL DUMPING	` 4.00	0.00
0	PERI-N-017.000	93	ROADSIDE SLOPE MANAGEMENT	1.00	0.00
1	PERI-N-018.000	93	PROVIDE RESOURCES MANAGEMENT SPECIALIST	4.00	196.00
Park Sub-	total			158.00	4733.50
Grand Tot	a(========	=====	***************************************	====== 158.00	4733.50

32 projects printed

PERI-C-001.000 PS Page: 0001

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-001.000

TITLE: PROVIDE PRESERVATION GUIDE FOR ELKHORN TAVERN

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 3.00

SERVICEWIDE ISSUES: CO6 NEED HSPGS

CULTURAL RESOURCE TYPE CODE: STRC

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

The Elkhorn Tavern was restored by the National Park Service because of its significance to the story of the battle. It was used by the Union Army as the Provost Marshall's office, as the Quartermaster office, a field headquarters, a sutler's store and as a hospital. It was used by the Confederates as a field headquarter and as a hospital. The battle took place around the Tavern on both March 7 and 8. In late 1862 and early 1863, the Tavern was used as a telegraph station by the Union Army. It was apparently burned by bushwhackers sometime soon after its use by the Union Telegraph station. After the Tavern was reconstructed, there was no Historic Structure Preservation Guide prepared. Routine cleaning followed standard maintenance practices and Regional Office assistance/consultation was secured for other actions. There is still a need for the Guide.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Prepare Historic Structure Preservation Guide. Its completion will provide the necessary guidance for the maintenance staff and subsequent foremen who may have restoration/preservation experience. The Tavern will be cared for properly on a timely basis.

BUDGE	ET AN	D FTEs:		FUNDED		
		Source	Act Type		(\$1000s)	FTEs
Year	1:					
Year	2:					
Year	3:					
Year	4:					
						=====
			Total:		0.00	0.0

### PROJECT STATEMENT SHEET

\_\_

Source Act Type Budget (\$1000s) FTEs

Year 1: RG-CR-MTN PRO 3.00 0.1

Year 2:
Year 3:
Year 4:

Total:

3.00

0.1

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(2)

PERI-C-002.000 PS Page: 0003

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-002.000

TITLE: PRESERVATION AND PROTECTION OF THE COLLECTION

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 50.00

SERVICEWIDE ISSUES: C16 MUS STORAGE

CULTURAL RESOURCE TYPE CODE: OBJC

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

The park has a small collection of objects primarily associated with the battle, but which includes some shards and arrowheads. A part of the Civil War objects are on display in the exhibit cases. These cases are located in a locked area accessible only by park staff. The collection storage area is a dedicated space but is too small to provide room for all storage cases or a work area. A fire and intrusion alarm system was installed in 1992. There is no fire suppression system in the building.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Provide a separate locked storage and work area for the collection, with temperature and humidity controls and a fire suppression system. Secure training in collections care for one or more staff members. Complete all required collectons documents including Collection Management Plan, Collection Preservation Guide, Scope of Colletions Statement, Collection Storage Plan, and Collection Condition Survey.

BUDGE	ET AND FTES:		INDED		
	Source		UNDED Budget (\$1000s)	FTEs	
Year	1:				
Year	2:				•
Year	3:				
Year	4:				
				======	
		Total:	0.00	0.0	
	Source		FUNDED Budget (\$1000s)	FTEs	

PERI-C-002.000 PS Page: 0004

PROJECT STATEMENT SHEET

Year 1: CONSTRUCT PRO 20.00

0.1

SVC-OTHER RES

30.00

0.7

Subtotal:

50.00

0.8

Year 2:

Year 3:

Year 4:

Total:

50.00

0.8

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(2)

PERI-C-003.000 PS Page: 0005

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-003.000

TITLE: ARCHEOLOGICAL RESEARCH

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 60.00

SERVICEWIDE ISSUES: CO2 INADEQUATE INV

CULTURAL RESOURCE TYPE CODE: COMB

10-238 PACKAGE NUMBER: 114

### PROBLEM STATEMENT:

There has been little archeological research or field work conducted at the park, resulting in base information insufficient for planning and management activities.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Complete an Archeological Overview and Assessment and a NHPA, Section 110 archeological survey.

### BUDGET AND FTES:

	Source		FUNDED Budget (\$1000s)	FTEs
Year 1:				
Year 2:		·		
Year 3:				
Year 4:				
		Total:	0.00	0.0
	Source		NFUNDED Budget (\$1000s)	FTEs
Year 1:	REG-OTHER	RES	30.00	0.5
Year 2:	REG-OTHER	RES	30.00	0.5
Year 3:				
Year 4:				
		Total:	60.00	1.0

PERI-C-003.000 PS Page: 0006

### PROJECT STATEMENT SHEET

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 E(1)

PERI-C-004.000 PS Page: 0007

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-004.000

TITLE: REMOVAL OF WINTON SPRING HOUSE

FUNDING STATUS: FUNDED: 19.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: C13 REHAB/RESTORAT

CULTURAL RESOURCE TYPE CODE: STRC

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

The Winton Spring House was built around 1905 in the general area of the location of a Civil War cabin. The structure has no particularly outstanding architectural features. It was used as the superintendent's quarters when the park was established. Later it was converted into two apartments. In 1976, it was ordered by both the Regional Safety Officer and the Public Health Officer that it no longer be used as quarters until or unless extensive modifications were accomplished. Conservative estimates place these modifications at a cost of \$300,000.00. The house is an intrusion on the battlefield.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Clearance to remove the structure was sought through the Section 106 consultation process. Both the SHPO and the Advisory Council concurred (1993) in removal. It will be removed during Fiscal Year 1993 (contract).

# BUDGET AND FTEs: Source Act Type Budget (\$1000s) FTEs Year 1: REG-OTHER MIT 19.00 0.1 Year 2: Year 3: Year 4: Total: 19.00 0.1 Source Act Type Budget (\$1000s) FTEs

Year 1:

PERI-C-004.000 PS Page: 0008

### PROJECT STATEMENT SHEET

Year 2:

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): NHPA

EXPLANATION: Section 106 compliance completed

PERI-C-005.000 PS Page: 0009

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-005.000

TITLE: PLACE OVERHEAD UTILITY LINES UNDERGROUND

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 20.00

SERVICEWIDE ISSUES: C13 REHAB/RESTORAT

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER: 134

### PROBLEM STATEMENT:

A number of other projects, both cultural and natural, address the problem of the historic scene. However, no where else is the problem of the overhead power lines considered. These lines are on poles across several sections of the park. Some of these lines are highly visible and detract from the historical scene, as well as scar the landscape. While some of these lines serve park facilities, others merely traverse park lands to serve their clients.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Placing the electric utility lines underground would restore the battlefield appearance and reduce the necessity of utility maintenance personnel from entering the park where visitor vehicles are not allowed. This would be another step in returning the battlefield to its original appearance in 1862. A 10-238, Pkg. 134, "Underground Overhead Utility LInes" has been submitted and approved.

BUDGET AI	ND FTES:				
	Source		FUNDEDBudget (\$1000s)	FTEs	
Year 1:					
Year 2:					
Year 3:					
Year 4:			·		
		Total:	0.00	0.0	
		UN	IFUNDED		
	Source	Act Type	Budget (\$1000s)	FTES	

PERI-C-005.000 PS Page: 0010

### PROJECT STATEMENT SHEET

Year 1: SVC-OTHER MIT

20.00

0.0

Year 2:

Year 3:

Year 4:

\_\_\_\_\_

Total:

20.00

0.0

### (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

If the power lines remain in their present state, there will be continued impairment to the historic scene. The overhead lines also require that the right-of-way be kept cleared, resulting in a constant scar in the vegetative cover.

We will also continue to work with the utility company in an effort to get them to put the utility lines underground at their expense.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C(16)

PERI-C-006.000 PS Page: 0011

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-006.000

TITLE: PRESERVE AND MAINTAIN SECONDARY HISTORIC RESOURCES

FUNDING STATUS: FUNDED: 48.00 UNFUNDED: 48.00

SERVICEWIDE ISSUES: C12 PRESERVE MGMT

CULTURAL RESOURCE TYPE CODE: COMB

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

There are three historic road traces listed on the LCS: Telegraph Road, the Ford Road and the Huntsville Road. two must be preserved and the last may be preserved. The remains of the Union trenches on the bluffs above Little Sugar Creek are on the LCS and must be preserved. The Winton Spring, a source of water for the soldiers, is on the LCS and must be preserved. foundation stones believed to be the foundation of Pratt's Store are on the LCS and must be preserved. Two monuments honoring the soldiers are on the LCS and must be preserved. The Clemens House site is not on the LCS but the house is mentioned in the official records and the site should be maintained. Twenty-three cannon are placed on the battlefield in positions where there were artillery batteries during the battle. The cannon tubes are original but the carriages are reproductions. These both must be preserved and maintained. Worm fences have been rebuilt on historic fence lines and although the existing fence is not historic, it must be maintained to preserve the historic scene.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Roads will be maintained by occasional mowing and use by park vehicles to retain a "trace" appearance approximating their historic appearance. The worm fences will be kept in repair to delineate the historic fence lines. The Winton Spring will be cleaned as necessary to remove all plant growth impeding the flow of water and changing its historic appearance. The monuments will be kept in good repair by repointing and cleaning, as needed. The cannon carriages will be repaired and painted on a three-year cycle (one-third each year). The trenches will have any undergrowth\removed, leaves and tree limbs will be raked out and removed; inspections will be made to insure the trench remains do not fill in with washed dirt and rocks. All of the above actions are continuing routine maintenance and have no adverse or significant affect upon any of these historic structures.

### PROJECT STATEMENT SHEET

BUDGE			FI	JNDED	
				Budget (\$1000s)	
Year	1:	PKBASE-CR	MIT	12.00	0.5
Year	2:	PKBASE-CR	MIT	12.00	0.5
Year	3:	PKBASE-CR	MIT	12.00	0.5
Year	4:	PKBASE-CR	MIT	12.00	0.5
			Total:	48.00	2.0
	<del>-</del>			UNDED	
		Source	Act Type	Budget (\$1000s)	FTEs
lear	1:	RG-CR-MTN	MIT	12.00	0.5
Year	2:	RG-CR-MTN	MIT	12.00	0.5
Year :	3:	RG-CR-MTN	MIT	12.00	0.5
Year 4	4:	RG-CR-MTN	MIT	12.00	0.5

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C (4)

### PERI-C-007.000 PS Page: 0013

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-007.000

TITLE: IMPLEMENT VEGETATION TREATMENT PLAN

FUNDING STATUS: FUNDED: 4.00 UNFUNDED: 20.00

SERVICEWIDE ISSUES: C13 REHAB/RESTORAT

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

The entire park is the historic resource and we are charged to keep the appearance as nearly like it was at the time of the battle, as possible. A historic base map was prepared by Edwin C. Bearss in January, 1957 and revised in March, 1962. A Vegetation Treatment Plan was developed in 1963, on the basis of Bearrs' map. This plan has been mostly implemented, but there remain sections of open land to be reforested and forested land to be opened to reach the vegetation regimes of 1862.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

The 600 acres of open fields should be maintained through the Historic Leasing Program. When the lease period expires on these fields, portions which need to be reforested will be withdrawn from the lease program. Areas of forest that need to be cleared to open fields will be treated as funding allows. The prescribed burn program will continue as a measure of reducing the invasion of juniper trees in the hardwood forests. The existing prairie restoration plot will be phased out and replanted with trees; a new prairie plot will be established in its proper location. Completion of the Vegetation Treatment Plan is expected to take about 30 years.

### **BUDGET AND FTES:**

		FI	JNDED		
	Source			(\$1000s)	FTEs
Year 1:	PKBASE-CR	MIT		1.00	0.1
Year 2:	PKBASE-CR	MIT		1.00	0.1
Year 3:	PKBASE-CR	MIT		1.00	0.1
Year 4:	PKBASE-CR	MIT		1.00	0.1
		Total:		4.00	0.4

PERI-C-007.000 PS Page: 0014

				IINF	UNDED			
		Source	Act I		Budget	(\$1000s	s) I	FTES
Year	1:	REG-OTHER	MIT			5.00		0.1
Year :	2:	REG-OTHER	MIT			5.00		0.1
Year	3:	REG-OTHER	MIT			5.00		0.1
Year	4:	REG-OTHER	MIT	•	•	5.00		0.1
	•			:		======	.=======	
		•	Total	.:	2	0.00		0.4

### (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

Park may or may not continue to approximate appearance at the time of the battle. With no plan to insure open fields or wooded areas, improper decisions could be made which would result in a changed appearance.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C(19)

### PERI-C-008.000 PS Page: 0015

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-008.000

TITLE: HISTORICAL RESEARCH

FUNDING STATUS: FUNDED: 4.00 UNFUNDED: 20.00

SERVICEWIDE ISSUES: CO8 NEED ADMN HIST

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER: 135

### PROBLEM STATEMENT:

An administrative history was prepared in 1974. It does not meet the criteria established in NPS-28. The park's Legislative History has not been completed. There is no comprehensive bibliography on cultural resources references on the park.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

The Park Ranger (History) is not technically qualified to write the Administrative or Legislative histories. A 10-238 has been approved for this project. The Park Ranger (History) can compile a bibliography.

### BUDGET AND FTES:

		FT	JNDED	
			Budget (\$1000s)	
Year 1:	PKBASE-CR	RES	1.00	0.1
Year 2:	PKBASE-CR	RES	1.00	0.1
Year 3:	PKBASE-CR	RES	1.00	0.1
Year 4:	PKBASE-CR	RES	1.00	0.1
			=======================================	=======================================
		Total:	4.00	0.4
		UNF	UNDED	
			Budget (\$1000s)	
Year 1:	PKBASE-CR	RES	10.00	0.3
Year 2:	PKBASE-CR	RES	10.00	0.3
Year 3:				
Year 4:				

### PROJECT STATEMENT SHEET

Total:

20.00

0.6

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.6

PERI-C-009.000 PS Page: 0017

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-009.000

TITLE: HSPG, FEDERAL EARTHWORKS

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 20.00

SERVICEWIDE ISSUES: C06 NEED HSPGS C13 REHAB/RESTORAT

CULTURAL RESOURCE TYPE CODE: COMB

10-238 PACKAGE NUMBER: 238

### PROBLEM STATEMENT:

The Federal Earthworks were constructed at the time of the Battle of Pea Ridge in 1862. They presently receive only routine maintenance, which does not include the more complex steps of historic structures preservation. There are trees and bushes growing within the earthwork trenches and they have filled in greatly due to erosion.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Develop a Historic Structure Report and a Historic Structure Preservation Guide to set forth comprehensive steps necessary for programming, housekeeping, and routine and cyclic preservation. Archeological pre-testing will be necessary.

BUDGET AND FTES:						
	Source		Budget (\$1000s)	FTES		
Year 1:						
Year 2:						
Year 3:						
Year 4:						
		Total:	0.00	0.0		
		IIN	FUNDED			
	Source		Budget (\$1000s)	FTEs		
Year 1:	CRPP	RES	10.00	0.3		
Year 2:	CRPP	RES	10.00	0.3		
Year 3:						

### PROJECT STATEMENT SHEET

Year 4:

Total:

20.00

0.6

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL NHPA

EXPLANATION: 516 DM6 App. 7.4 B(2)

PERI-C-010.000 PS Page: 0019

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-010.000

TITLE: BOUNDARY/RESOURCE STUDY

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 30.00

SERVICEWIDE ISSUES: C10 SPECIAL STUDY C17 CTRL ENV IMPAC

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER: 163

### PROBLEM STATEMENT:

Northwest Arkansas is the fastest growing area in the state and is experiencing rapid, incremental development. This type of development is encroaching on the historic scene of the park.

Also, secondary battle areas, encampment locations, and some major troop movement areas were left out of the original park boundary because of local opposition to land acquisition. These resources are increasingly threatened by development.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct a study of the battlefield resources outside the current boundary. Using criteria from the American Battlefield Protection Program, determine resource integrity and significance and recommend measures to protect the resources, including the historic scene.

Amend the 1963 Master Plan to complete a General Management Plan which will set forth a contemporary management concept for the park, establish a role for the unit within the context of regional trends and plans for conservation, recreation, transportation, economic development, and other regional issues; and identify strategies for resolving issues and achieving management objectives within a period of ten years.

BUDGET AND FTES:						
	Source	_	UNDED Budget (\$1000s)	FTEs		
Year 1:						
Year 2:						
Year 3:			•			
Year 4:						

### PROJECT STATEMENT SHEET

Total:

0.00

0.0

-----UNFUNDED-----

Source

Act Type

Budget (\$1000s)

**FTEs** 

Year 1:

REG-OTHER RES

30.00

0.8

Year 2:

Year 3:

Year 4:

Total:

30.00

0.8

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

Failure to determine permanent protection needs of exterior resources will leave them exposed to development and will, eventually, lead to their destruction. This development will also adversely affect the historic scene within the park.

Failure to amend the Master Plan will perpetuate management decisions based on information and initiatives that are 30 years out of date, threatening the integrity of the park and its resources.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(10)

PERI-C-011.000 PS Page: 0001

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-011.000

TITLE: RELOCATE HIGHWAY 62

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 4000.00

SERVICEWIDE ISSUES: C17 CTRL ENV IMPAC C13 REHAB/RESTORAT

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

Federally numbered State Highway 62 runs through the southern edge of the park, south of the Elkhorn tavern battlefield. This two-lane road is scheduled to be expanded to four lanes by Fiscal Year 1997. Currently, over a million vehicles per year pass through the park on this highway. With the rapid growth of the area, increasing tourism, and developing recreation resources to the north and east, this major north-south road will see much more use. The road is a significant auditory and visual impact on the historic scene; expansion to four lanes will have a devistating impact on the historic scene and will increase traffic danger to visitors entering and exiting the park.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

When construction funds become available, the road should be moved out of the park adjacent to the southern boundary. The two-lane road should then be removed and the area restored to a historical appearance. Enhancement funds from the Intermodal Surface Transportation Act could be used to relocate the road, restore the old road bed to a historical appearance, reroute the new entrance road, and provide a development buffer zone opposite the new park entrance.

BUDGET AN	D FTEs:		FUNDED		
	Source		Budget (\$1000s)	FTEs	
Year 1:					
Year 2:					
Year 3:					
Year 4:					
			************	:=====	
		Total:	0.00	0.0	

### PROJECT STATEMENT SHEET

UNFUNDED						
-	Source	Act Type	Budget (\$1000s)	FTEs		
Year 1:	ST-LOCAL	MIT	4000.00	0.0		
Year 2:						
Year 3:						
Year 4:			,			
		Total:	4000.00	0.0		

### (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

A four lane highway requires more construction space than the 80' corridor the State owns through the park. If the four lane is not constructed outside the park, inside the park it will have to revert to two lanes. This will cause increased traffic hazards and possible delays in traffic movement; it will also cause severe traffic hazards and delays to visitors entering and leaving the park.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 E(8)

PERI-C-012.000 PS Page: 0003

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-012.000

TITLE: ETHNOGRAPHIC OVERVIEW & ASSESSMENT

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 50.00

SERVICEWIDE ISSUES: CO4 ETHNOGRAPHY

CULTURAL RESOURCE TYPE CODE: ETHN

10-238 PACKAGE NUMBER: 238

### PROBLEM STATEMENT:

Cherokee Indians passed through what is now Pea Ridge NMP on the Northern Route of the Trail of Tears. Tribal political factionalism resulting from that forced removal from ancestral lands caused some Cherokees to fight on the side of the Confederacy 24 years later at the Battle of Pea Ridge. However, little is known about contemporary Cherokee concerns regarding the battle or interpretation of their ancestors' participation.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Complete an Ethnographic Overview and Assessment to include: a list of Native American and other ethnic groups historically associated with the park; a statement of each group's concerns about management of the park and interpretation of their association with it; the context for developing specialized ethnographic studies; identification of and recommended protection measures for intangible cultural resources; and recommendations for developing informed and culturally sensitive working relationships with the groups.

# BUDGET AND FTES: Source Act Type Budget (\$1000s) FTEs Year 1: Year 2: Year 3: Year 4: Total: 0.00 0.0 Source Act Type Budget (\$1000s) FTEs

PERI-C-012.000

PROJECT STATEMENT SHEET

PS Page: 0004

Year 1: REG-OTHER RES

50.00

1.0

Year 2:

Year 3:

Year 4:

\_\_\_\_

Total:

50.00

1.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2,1.6

PERI-C-013.000 PS Page: 0025

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-013.000

TITLE: RESOLVE HORSE TRAIL ISSUE

FUNDING STATUS: FUNDED: 3.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: C18 CTRL VIS IMPAC C23 CONFLICT ACTVS

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Before the mid-1970's, horse rider use of the park was open and uncontrolled. The park then established a formal horse trail to regulate and limit such use; this trail was installed informally. Since then, the trail has caused erosion in both field and forest areas. In turn, the erosion has caused the riders to modify the trail, resulting in expanded erosion and causing resource damage and rider/staff safety hazards.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

This issue must be reviewed and all factors considered: safety, resource impacts, appropriateness, fiscal resources, national politics, alternate trail resources, Trail of Tears management plan, etc. The issue should receive broad public review and input, with greatest weight on what is best for the primary resource - the park. Once a final decision has been reached, it should be advertised and implemented.

The park Quality Commitment Team will review and structure the issue for public review.

# BUDGET AND FTEs:

				FI	INDED				
		Source	Act			(\$1000s)	)	FTEs	
Year 1	l:	PKBASE-OT	RES			3.00		0.1	
Year 2	2:								
Year 3	3:								
Year 4	1:								
								====	
			Tota	1:		3.00		0.1	

 	TINE	TINDED	 
	Act Type		FTEs

Year 1:

Year 2:

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL NHPA

EXPLANATION: 516 DM2 App. 2, 1.5

PERI-C-014.000 PS Page: 0027

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-014.000

TITLE: PROVIDE SUFFICIENT CRM STAFF

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 80.00

SERVICEWIDE ISSUES: C24 INSUFF STAFF

CULTURAL RESOURCE TYPE CODE: COMB

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Due to lack of funding for a CRM dedicated position, CRM responsibilities are split between the Superintendent, the Chief of Maintenance, and the Chief Ranger. Consequently, there is little comprehensive planning and insufficient process continuity. The current Superintendent is the only park employee with CRM training and experience; his management duties do not allow sufficient time for the CRM process. Other staff do not have adequate academic training or experience to perform the CRM at an appropriate level.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Establish and fund a CRM position. This position could be combined with the NRM position and training provided as necessary to bring the incumbent to full performance level for whichever resource weakness they have.

## 

		PROJECT	STATEMENT SH		C-014.000 age: 0028
Year :	2: PKBASE-CR	ADM	20.0	0.5	
Year :	3: PKBASE-CR	ADM	20.0	0.5	
Year 4	4: PKBASE-CR	ADM	20.0	0.5	
					ı
		Total:	80.0	00 2.0	

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.1

PERI-C-015.000 PS Page: 0029

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-C-015.000

TITLE: STAFF CRM TRAINING

FUNDING STATUS: FUNDED: 1.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: C25 NEED CRM TRAIN

CULTURAL RESOURCE TYPE CODE: COMB

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Year 3:

Because the staff has no background in CRM, there is a lack of understanding about the comprehensive nature of CRM and the support it needs from all phases of the operation. Orientation training is needed concerning resource types and their different needs, regulations and policies affecting CRM, and the various CRM processes.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

The Superintendent can develop and provide an overview of CRM and its various aspects. This training can be presented on-site to groups of employees so that their knowledge of and support for CRM is enhanced to the appropriate level.

## BUDGET AND FTES: -----FUNDED-----Source Act Type Budget (\$1000s) FTEs Year 1: PKBASE-OT ADM 1.00 0.1 Year 2: Year 3: Year 4: Total: 1.00 0.1 -----UNFUNDED-----Source Act Type Budget (\$1000s) FTEs Year 1: Year 2:

Year 4:

\*

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.7

PERI-N-001.000 PS Page: 0001

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-001.000

TITLE: NATURAL RESOURCES BASIC INVENTORY

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 30.00

SERVICEWIDE ISSUES: N20 BASELINE DATA

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

The park does not have a complete RBI. There is documentation on the historic resources, but pratically none on the natural and archeological resources. This lack of basic natural resource data creates a gap in the formulation of sound management plans and decisions. The park's natural resources cannot be managed adequately until it is known what resources exist, their conditions and how and to what extent these resources may be threatened.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct an overview and assessment of the RBI of the park, including a bibliography; make recommendations for further inventory studies, including costs and personnel requirements.

BUDGE	ET ANI	) FTEs:		TNID ED			8
		Source	Act Type	Budget	(\$1000s)	FTEs	_
Year	1:						
Year	2:						
Year	3:						
Year	4:				•		
				======		4===	
			Total:		0.00	0.0	
			UNI	FUNDED			_
		Source	Act Type	Budget	(\$1000s)	FTEs	
Year	1:	RG-NS-RES	RES	3	30.00	1.0	
Year	2:						

Year 3:

Year 4:

Total:

30.00

1.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.6

PROJECT	NUMBER:	PERI-N-002.00	0
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TITLE: MANAGEMENT OF DEER HERD

Develope deer management options

**FUNDING STATUS:** 

FUNDED: 0.00

UNFUNDED: 18.00

SERVICEWIDE ISSUES: NO1 NAT ANML OVPOP

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

When the park was established in 1956, there was no legal hunting In Benton County. The deer population increased over the years to the point that the Arkansas Game and Fish Commission opened the first deer season in the mid-1960's. With the protection of wildlife afforded by the park, the resident deer population has continued to increase. Casual observations now indicate that the herd may be increasing at a rate which could be determinal to the carrying capacity of the park. The existence of this resident herd has caused a poaching problem to occur.

DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct research to determine the population of the deer herd, its age structure, the available habitat, the productivity and carrying capacity for the deer. This study should also recommend methods for control of the herd. The effects of poaching on the herd should also be investigated.

do you have anther-less hunts in BUDGET AND FTES:

----FUNDED-----Act Type Budget (\$1000s) Source Is here here resident?

Peer are repreh resident in one place
your round they after have summer or
uniter Panges. This needs to be sampled. Year 1: Year 2: Year 3: Year 4:

> Total: 0.00

-----UNFUNDED-----Act Type Budget (\$1000s) Source

Year 1: **RG-NS-RES RES** 

15.00

0.5

Proposal Date: 92 ywood This be contrated to 4 University? what is the SPIE

	PROJECT S	STATEMENT	SHEET	PERI-N-00: PS Page:	
Year 2:	PKBASE-NR	MIT		1.00	0.1
Year 3:	PKBASE-NR	MIT		1.00	0.1
Year 4:	PKBASE-NR	MIT		1.00	0.1
			======		=====
		Total:	1	L8.00	0.8

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(9)

PERI-N-004.000 PS Page: 0005

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-004.000

TITLE: RE-ESTABLISH WILD TURKEY

FUNDING STATUS: FUNDED: 0.00 UNF

UNFUNDED: 11.50

SERVICEWIDE ISSUES: NO2 T&E ANIMAL

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

BUDGET AND FTEs:

Evidence indicates that wild turkeys were present in the Pea Ridge area in the past, but had disappeared years ago. There have been several confirmed sightings since that time. This project proposes research to investigate the feasibility of reestablishment of this native bird.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Research to determine the cause of the decline of turkeys within the park area and on what habitat and population dynamics are favorable for successful reestablishment of the species (through a cooperative program with the Arkansas Game and Fish Commission).

DODGET	AND IIDS.		NDED			
	Source	Act Type		(\$1000s)	FTEs	
Year 1	:					
Year 2	:					
Year 3	:					
Year 4	:					
		Total:		0.00	0.0	
		IINF	UNDED			
	Source	Act Type		(\$1000s)	FTES	1
Year 1	: RG-NS-RES	RES	1	10.00	(0.3) - 5/970	?
Year 2	: PKBASE-NR	MIT		0.50	0.1	, ,
Year 3	: PKBASE-NR	MIT		0.50	0.1	

PERI-N-004.000 PS Page: 0006

PROJECT STATEMENT SHEET

Year 4: PKBASE-NR MIT

0.50

0.1

Total:

11.50

0.6

## (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

The wild turkey is apparently being reestablished in the area on its own. Without research, however, it will not be possible to determine the cause of their disappearance in past years nor whether or not conditions are favorable for successful reestablishment of the species.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 E(6)

PROJECT NUMBER: PERI-N-0Q5.000

Clarify

TITLE: QUANTIFICATION OF FEDERAL WATER RIGHTS

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 30.00

SERVICEWIDE ISSUES: N13 WATER RIGHTS

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Water resources study is required to quantify the total water needs of the parks and for the U.S. Government to assert its claim to surface and ground waters within the area to comply with the President's initiative of June 6, 1978, concerning water resources. The study will also serve to inform park planners and managers of the legally available water for NPS use.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Water Resources Study will be conducted. Southwest Regional Office will be responsible for the project. Research and map land ownerships, water sources, diversions and distribution systems for the area to determine quantity of water legally available to the U.S. Government.

the 1	U.S.	Government	•	<b>,</b>		.,	
BUDG	ET AN	D FTEs:	-	minen.			
		Source	Act Type	UNDED Budget		FTEs	:
Year	1:						
Year	2:						
Year	3:					•	
Year	4:						
					.=========		
			Total:		0.00	0.0	
			UN	FUNDED			
		Source	Act Type			FTEs	Seems
Year	1:	WATER-RES	RES	3	0.00	(1.0)	11.94
Year	2:					اشللنوا	Staff me
						DE	& WATEA

PERI-N-005.000 PS Page: 0008

### PROJECT STATEMENT SHEET

Year 3:

Year 4:

Total:

30.00

1.0

## (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

If the study is not conducted, we will not be in compliance with the President's initiative of June 6, 1978, concerning water resources.

Quantify the total water needs of the park to maintain the environmental integrity and use of the area in compliance with the President's initiative of June 6, 1978.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(10)

PERI-N-006.000 PS Page: 0009

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-006.000

TITLE: MAINTENANCE OF TALL GRASS PRAIRIE

FUNDING STATUS: FUNDED: 2.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: NO8 CULT LANDSCAPE

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Historical records indicate that tracts of native prairie were present in this area at the time of the Battle of Pea Ridge in 1862. The mission of the National Park Service is not only to preserve historical values, but also to preserve and restore the natural scene of the battlefield. The forests in the battlefield area today somewhat resemble the forests of 1862, but the native prairie flora was extirpated many years ago by farming or grazing activities.

In keeping with the policy of preservation and restoration, the National Park Service awarded a contract to the University of Arkansas to reestablish a tract of native prairie within the park. The project began as a one acre plot in June, 1975, and was expanded to two acres in 1976. Experimental work was conducted in 1977 to learn more about prairie restoration and management, and a third acre was established in 1978. The plot was doubled in 1991. Big Bluestem, Little Bluestem, Sideoats Gamma, Switch Grass, and Indian Grass were seeded in the plots. Some native forbs were also transplanted into the plots. Successful regeneration has enabled this project to be interpreted to the park visitors.

This prairie is located in the wrong area; the proper location is approximately 1 mile to the northwest.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Amonitoring and maintenance of the Tall Grass Prairie Project by both the Principal Investigator and the park staff should continue until such time that this plot location is phased out. Mowing and/or burning is a part of the maintenance process as determined by the Principal Investigator. A vegetative census will be conducted in June and September each year to monitor changes in vegetation in the restoration plot.

In Arkansas and other forested regions, native prairie must be mowed or burned every few years or brush and trees will invade,

crowd out the grasses, and eventually return the area to forest. It is likely that fire caused by lightening or set by Indians maintained prairie in the area during pre-historic and early settler times.

Data from the management of this plot should be used to develop and manage the new plot in its proper location.

## BUDGET AND FTES: -----FUNDED------Source Act Type Budget (\$1000s) Year 1: PKBASE-NR MIT 1.00 0.1 Year 2: Year 3: PKBASE-NR MIT 1.00 0.1 Year 4: Total: 2.00 -----UNFUNDED-----Source Act Type Budget (\$1000s) Year 1: Year 2: Year 3: Year 4: Total: 0.00 0.0

## (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

Funding is no longer available to continue this as a research project. If we follow this course we may lose what we have gained as the research shows some sort of management for the prairie to exist, either mowing or burning. At the present time the Park has funded the mowing or burning to maintain the integerity of the prairie plot.

Continue to monitor and maintain the project as may be recommended by the Principal Investigator, Dr. Edward E. Dale. Dr. Dale has, on his own time and funds, conducted a vegetation census twice each year since the conclusion of the funded project. This will be a continuing activity to monitor any

changes that may occur naturally or as a result of mowing or burning. Dr. Dale prepared his final report on this project April 1, 1980.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C (4)

PERI-N-007.000 PS Page: 0012

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-007.000

TITLE: INTEGRATED PEST MANAGEMENT

FUNDING STATUS: FUNDED: 4.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: NO4 NON-NAT ANIMAL

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Defoliation of ornamental trees and shrubs and forest trees in high visitor use areas presents an eyesore and decreases the quality of the park experience. The main offenders are Apple Scab and Cedar Apple Rust that infect the Flowering Crabapple and Hawthorne trees in the vicinity of the Visitor Center, and Bagworm and Fall Webworm that defoliate forest trees and a few ornamentals. In order to prevent eyesores and possible epidemic situations from occurring, it is necessary to closely monitor the insect and disease conditions in the forested and landscaped areas.

Tick populations inside the park are ten times what they are outside the park, exposing staff and vistors to lime disease and aggravating bites. The chigger population is also very large. Wasps nest in and outside of the Elkhorn Tavern, exposing visitors and staff to painful stings. Mice invade work and storage areas, causing damage to materials and records.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Pesticide application on an annual basis is the most effective way to control these pests. Only those pesticides listed on the WAS approved Pesticide Program will be used and use will be restricted as outlined in the Director's memo of February 6, 1981.

Apple Scab and Cedar Apple Rust should be treated in the early spring when the young leaves are just emerging. Saturation applications of insecticide, preferably Thuricide 32-LV, containing the bacterium Bacillus Thuringiensis, to infected trees is recommended during the first two weeks in June for adequate reduction of the bagworm population. Fall webworm, on the other hand, requires spraying of this same insecticide during August and September. It can also be controlled by pruning of limbs when webs are small. Forested areas should be closely monitored by ground inspection to spot outbreaks. Cooperation and consultation will be sought with the U.S. Forest Service,

Division of Pest Control laboratory staff at Pineville, Louisiana; the Horticulture and Entomology Departments, University of Arkansas, Fayetteville; and the Benton County Extension Agents, USDA.

Write and implement a comprehensive Integrated Pest Management Plan.

#### **BUDGET AND FTES:** -----FUNDED------Act Type Budget (\$1000s) Source FTEs Year 1: PKBASE-NR MIT 1.00 0.1 Year 2: PKBASE-NR MIT 1.00 0.1 Year 3: PKBASE-NR MIT 1.00 0.1 Year 4: PKBASE-NR MIT 1.00 0.1 Total: 4.00 0.4 -----UNFUNDED-----Act Type Budget (\$1000s) FTEs Source

Year 1:

Year 2:

Year 3:

Year 4:

Total: 0.00 0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C(19)

PERI-N-008.000 PS Page: 0014

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-008.000

TITLE: FERAL AND DISEASED ANIMALS

FUNDING STATUS: FUNDED: 2.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: NO4 NON-NAT ANIMAL

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Occasionally, feral animals, primarily dogs and cats, disturb trash and garbage cans in visitor use areas and harass the wildlife. Diseased animals, primarily wild animals, may pose threats to visitor safety.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Animals considered dangerous or a particular nuisance, will be destroyed or captured and removed to more remote areas of the park. Feral animals will be destroyed.

#### **BUDGET AND FTEs:**

		F	UNDED			
	Source	_		(\$1000s)	FTEs	
Year 1:	PKBASE-OT	MIT		0.50	0.1	
Year 2:	PKBASE-OT	TIM		0.50	0.1	
Year 3:	PKBASE-OT	MIT		0.50	0.1	
Year 4:	PKBASE-OT	MIT		0.50	0.1	
		Total:		2.00	0.4	
		UN	FUNDED			,
	Source	Act Type		(\$1000s)	FTEs	

Year 1:

Year 2:

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 E(7)

PERI-N-009.000 PS Page: 0016

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-009.000

TITLE: SOIL EROSION

FUNDING STATUS: FUNDED: 4.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: NO6 LAND USE PRAC

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

Several areas show evidence of erosion, particularly the horse trail. There is topsoil loss and isolated deterioration of fire roads within the park.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Erosion sites should be repaired in such a way that further erosion problems will be eliminated. An effort should be made to identify and monitor areas of possible future erosion.

Also, see C-013.

#### **BUDGET AND FTEs:**

	Source	-	UNDED Budget	(\$1000s)	FTEs	
Year 1:	SPECIAL-\$	MIT		1.00	0.1	
Year 2:	SPECIAL-\$	MIT		1.00	0.1	
Year 3:	SPECIAL-\$	MIT	•	1.00	0.1	
Year 4:	SPECIAL-\$	MIT		1.00	0.1	
		•				
		Total:		4.00	0.4	
	Source	UN Act Type	FUNDED Budget	(\$1000s)	FTEs	

Year 1:

Year 2:

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516b DM6 App. 7.4 C(19)

### PERI-N-010.000 PS Page: 0018

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-010.000

TITLE: HAZARDOUS TREES IN HIGH VISTOR USE AREAS

FUNDING STATUS: FUNDED: 35.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: N24 OTHER

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

For various reasons, particularly Dutch Elm disease, lightening strikes and aging, trees are losing limbs or falling during period of wind, rain, and ice. These trees present a hazard to park visitors.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Continued maintenance of trees and other vegetation. Damaged or diseased trees are removed to prevent futher deterioration. When equipment, not available to the park staff, is required, the work will be contracted to professionals.

#### BUDGET AND FTEs:

			FI	JNDED	
		Source		Budget (\$1000s)	FTEs
Year	1:	PKBASE-OT	MIT	15.00	0.2
Year	2:	PKBASE-OT	MIT	10.00	0.2
Year	3:	PKBASE-OT	MIT	5.00	0.1
Year	4:	PKBASE-OT	MIT	5.00	0.1
			Total:	35.00	0.6
			IINI	TUNDED	
,	<b></b>	Source	Act Type	Budget (\$1000s)	FTES

Year 1:

Year 2:

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 E(7)

PERI-N-011.000 PS Page: 0020

#### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-011.000

TITLE: CONTROL OF NOXIOUS WEEDS

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 12.00

SERVICEWIDE ISSUES: NO5 NON-NAT PLANTS

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

Over the past several years, thistle has invaded Arkansas to such an extent that it has been declared a noxious weed. In the park, it has become abundant in several old field areas that are being allowed to revert to their 1862 condition. Proliferation of the thistle in the park can become a problem to park neighbors. Livestock will not graze infested areas and it can be a problem in fall planted grains.

It is important that some control measures be taken so that the park is a good neighbor and also cooperative with the state in trying to control the weed.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

The best method of control at this juncture is the continued mowing of heavily infested areas in early summer when plants are in full bloom. Mowing will have to be repeated to prevent the plants from producing seeds. Some infected areas are relatively inaccessible to mowing equipment which may necessitate some removal of thistle plants by hand.

Another control method that merits consideration is the use of specific natural enemies in controlling the spread of musk thistle. Introduction of the musk thistle weevil may be carried out in selected areas where musk thistle is predominant. Availability of the weevil will determine whether or not this control method can be initiated. The project will be conducted in cooperation with the University of Arkansas Cooperative Extension Service.

Neither of these two methods will eradicate thistle. It may become necessary at some point to request authorization for use of chemicals in managing this weed problem.

BUDGET AND FTEs:

Source Act Type Budget (\$1000s) FTEs

Year 1:

Year 2:

Year 3:

Year 4:

		Total:		0.00	0.0	
	Source		FUNDED Budget	(\$1000s)	FTES	
Year 1:	RG-RM-NAT	MIT		3.00	0.1	
Year 2:	RG-RM-NAT	MIT		3.00	0.1	
Year 3:	RG-RM-NAT	MIT		3.00	0.1	
Year 4:	RG-RM-NAT	MIT		3.00	0.1	
			======		=======	
		Total:	. 1	L2.00	0.4	

## (OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS:

Failure to monitor and control this weed will result in its further spread in the park and onto adjoining lands.

Thistle can be controlled by several herbicides if properly timed. The plant is most susceptible to herbicides during rapid growth in the rosette stage, either in the fall or the spring. If application is made after the plant bolts, it is too late for good control.

Research has shown that mowing is most effective when the plants are at full bloom. If mowing is done before any heads bloom, there may be rapid development of lateral branches from buds in the axil of leaves. If mowing is delayed until after blooming is well along, the plant may have produced seeds. New stems can also develop from the base of mowed thistles, and these stems produce flowers and seeds for greater infestation. Mowing will usually have to be repeated to insure complete prevention of seed production.

The importation and release of natural enemies offers and

PERI-N-011.000 PS Page: 0022

#### PROJECT STATEMENT SHEET

alternative way to reduce infestations of musk thistle. Rhinocyllus Cornicus Froelich, commonly referred to as the musk thistle weevil, is one such natural enemy that feeds on the seeds in the developing flower heads. Preliminary research has shown that the weevil can contribute to a reduction in numbers of musk thistles.

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 C(19)

PROJECT NUMBER: PERI-N-012.000

TITLE: WATER RESOURCES PLAN

write

FUNDING STATUS: FUNDED: 0.00 UNFUNDED: 25.00

SERVICEWIDE ISSUES: N24 OTHER N12 WATER FLOW

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER: 155

#### PROBLEM STATEMENT:

Intermittent streams dissect the park terrain, and some are fed by springs such as the Winton Spring. Little Sugar Creek runs adjacent to the detached area, and the 100-year flood level extends to the bottom of the drainage swale at this site. There are four water-bearing horizons; the deepest two offer the greatest and most dependable yields. The quality of these waters is unknown. Additionally, there are farm ponds scattered through the park, and there is a water-filled rock quarry. There is no plan on the management or testing of any of these waters except that ground water used as a source for the park visitors center and residences.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct research for and write a water resources plan to guide the use, protection, and comprehensive management of surface and ground water resources, including research on exterior impacts, if any, to interior resources and recommendations for resolving those impacts. The plan should also address the drainage from the well house behind the residences.

BUDGET A	ND FTEs:		wood in the	uply The
	Source		FUNDED Budget (\$1000s)	FTEs
Year 1:				
Year 2:				
Year 3:				
Year 4:				
		Total:	0.00	0.0

Proposal Date: 93

help of MRD

PS Page: 0024

Source Act Type Budget (\$1000s) FTEs

Year 1: WATER-RES RES 25.00 0.5

Year 2:
Year 3:
Year 4:

Total: 25.00 0.5

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4E

PERI-N-013.000 PS Page: 0025

#### PROJECT STATEMENT SHEET

PROJECT NUMBER; PERI-N-013.000

determina

TITLE: FEDERAL MINERAL & GAS RIGHTS

FUNDING STATUS:

FUNDED: 0.00

UNFUNDED: 5.00

SERVICEWIDE ISSUES: N24 OTHER

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER: 238

#### PROBLEM STATEMENT:

There is no single document that quantifies Federal mineral and gas rights on formerly private parcels now constituting Pea Ridge NMP. Consequently, it is unknown what potential threats to the historic scene exist from reserved rights.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Research should be conducted to establish the existance of any reserved mineral/gas rights within the park boundary. If any such rights do exist, the study should make recommendations for acquisition, by priority. This research should be done by an abstracting company.

BUDGET AND FTEs:						
		Act Type				
Year 1:						
Year 2:						
Year 3:						
Year 4:						
		Total:		·		
		10tal:			0.0	
		Act Type				
Year 1:	ENER-MIN	RES		5.00	0.0	
Year 2:						,
Year 3:						

Year 4:

Total:

5.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(10)

PROJECT NUMBER: PERI-N-014.000

TITLE: FIRE MANAGEMENT

FUNDING STATUS: FUNDED: 17.00

UNFUNDED: 0.00

SERVICEWIDE ISSUES: NO7 NAT FIRE REGM

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

PROBLEM STATEMENT:

whol

Pea Ridge NMP has some 3,700 acres of forest. There are natural fires, arson fires, and the need for management prescribed fires to reduce fuel loads, reduce overpopulation of cedar trees, and facilitate re-establishment of the historic scene of 1862. The existing Fire Management Plan is out of date.

DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Complete the Fire Management Plan as required by FIREPRO.

#### **BUDGET AND FTEs:**

FUNDED								
		Source	Act Type		t (\$1000s	) 1	FTEs	•
Year	1:	PKBASE-NR FIRE-\$	PRO PRO		12.00 5.00		0.3 0.1	
			Subtotal:		17.00		0.4	
Year	2:							
Year	3:							
Year	4:							
			Total:		17.00		0.4	
UNFUNDED								

Act Type Budget (\$1000s)

Year 1:

Source

Year 2:

Year 3:

Proposal Date: 93

**FTEs** 

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): DOC

EXPLANATION: Fire Management Plan

PROJECT NUMBER: PERI-N-015.000

TITLE: BACKCOUNTRY MANAGEMENT PLAN

FUNDING STATUS: FUNDED: 6.00 UNFUNDED: 5.00

SERVICEWIDE ISSUES: N18 VIS USE-BCTRY

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

#### PROBLEM STATEMENT:

The park backcountry use is currently not controlled, measured, or managed in any formal way. The backcountry consists of those fields and forest areas located away from primary interpretive features and the headquarters/visitors center area. hiking trail and one horse trail through the backcountry. Additionally, the new Trail of Tears National Historic Trail management plan calls for an evaluation of access to the trail segments by pedestrians and horseback riders.

#### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct research for and prepare a Backcountry Management Plan. The plan should investigate current uses, examine alternatives for future use, including the Trail of Tears segments within the park, and make recommendations for use and management of the backcountry.

#### BUDGET AND FTES:

	Source	Act Type	UNDED Budget	(\$1000s)	FTEs
Year 1:	PKBASE-OT PKBASE-NR			2.00 4.00	0.1
		Subtotal:		6.00	0.2
Year 2:					
Year 3:		•			
Year 4:					
				*************	======
		Total:		6.00	0.2
	Source	UN] Act Type		(\$1000s)	FTEs

PERI-N-015.000 PS Page: 0030

PROJECT STATEMENT SHEET

Year 1: PKBASE-NR RES 5.00 0.2

Year 2:

Year 3:

Year 4:

Total:

5.00

0.2

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM6 App. 7.4 B(10)

address

PROJECT STATEMENT SHEET

PERI-N-016.000 PS Page: 0031

PROJECT NUMBER: PERI-N-016.000

TITLE: CONTROL ILLEGAL DUMPING

FUNDING STATUS:

FUNDED: 4.00

UNFUNDED: 0.00

SERVICEWIDE ISSUES: N16 NEAR-PARK DEV

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

There are locations within the park where trash, refuse, and junk is illegally dumped. There are residences located along the boundary from which trash and refuse wash into the park. Both the active dumping and the passive dumping are aesthetically adverse and might contribute to water pollution and direct threats to park wildlife through accidental contact or ingestion.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Establish and implement a regular inspection program for active and passive dumping on park lands. This program should include investigative techniques, procedures for obtaining compliance, and, if necessary, enforcement through appropriate court action. The program should be reviewed by the US Attorney for procedural issues and levels of prosecution.

### **BUDGET AND FTEs:**

Year 2:

			FI	UNDED		
		Source	Act Type	Budget	(\$1000s)	FTES
Year	1:	PKBASE-NR	PRO		4.00	0.2
Year	2:					
Year	3:					
Year	4:					
			Total:		4.00	0.2
			UN	FUNDED		
		Source	Act Type			FTEs
Year	1:					

### PROJECT STATEMENT SHEET

Year 3:

Year 4:

Total:

0.00

0.0

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.5

PERI-N-017.000 PS Page: 0033

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-017.000

TITLE: ROADSIDE SLOPE MANAGEMENT

FUNDING STATUS: FUNDED: 1.00 UNFUNDED: 0.00

SERVICEWIDE ISSUES: N24 OTHER

CULTURAL RESOURCE TYPE CODE: CULL

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

Ground slopes in cuts on the tour road are mostly covered with fescue grass, a non-native species. On slopes that are too steep to safely mow by equipment, the grasses and weeds have to be cut with hand tools, a very labor-intensive activity which is currently unfunded. In the 1970's, on one slope along the tour road, the park planted several individual crown-vetch plants, another non-native. These plants have since expanded to cover more of the slope and have mitigated the need for hand control of grasses and weeds in that specific location. The funding situation for roadside mowing is highly unlikely to improve any time soon. In the meantime, uncontrolled grass and weed growth on road slopes is unsightly and obtrusive to the historic scene.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Conduct research on the crown-vetch and other plants for ability to stabilize soil slopes and reduce mowing requirements. For those plants which are appropriate in terms of low risk for invasion of areas where they are not needed or desired, develop a plan for planting, monitoring, maintaining, and evaluating those plants on the subject road slopes.

plants on	the subject	ct road slo	pes.	and h	dege in h
BUDGET ANI	D FTEs:	F	イン UNDED	search	Thing
·	Source	Act Type		(\$1000s)	FTEs
Year 1:	PKBASE-OT	RES		1.00	0.1
Year 2:					
Year 3:	·				
Year 4:					
		Total:		1.00	0.1

### PROJECT STATEMENT SHEET

PS Page: 0034

Source Act Type Budget (\$1000s) FTEs

Year 1: VOL-INDEP RES 0.00 0.2

Year 2:

Year 3:

Year 4:

Total:

0.00

0.2

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL NHPA

EXPLANATION: 516 DM6 App. 7.4 C(19)

PERI-N-018.000 PS Page: 0035

### PROJECT STATEMENT SHEET

PROJECT NUMBER: PERI-N-018.000

TITLE: PROVIDE RESOURCES MANAGEMENT SPECIALIST

FUNDING STATUS: FUNDED: 4.00 UNFUNDED: 196.00

SERVICEWIDE ISSUES: N24 OTHER

CULTURAL RESOURCE TYPE CODE: N/A

10-238 PACKAGE NUMBER:

### PROBLEM STATEMENT:

There is no resources management position in the park organization, nor is there funding to create one. Some experience in resources management exists among the staff but there is not sufficient expertise or time to devote to such a critical function. Some assistance is available from other parks but not in sufficient quantity or timeliness to properly manage the park's resources.

### DESCRIPTION OF RECOMMENDED PROJECT OR ACTIVITY:

Establish a position for a resources management specialist and fund it. The major duty of the position would be to plan, develop, and implement a comprehensive process for inventorying, protecting, managing, monitoring, and evaluating the park's cultural and natural resources through independent research, requests for special research funding, and coordination of research activities conducted in the park.

BUDGET AND FTES:

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BUDGET	ZMD	rore.

PODGI	CI WINI	O FIES:	T31	minen	,	110	
		Source	Act Type		(\$1000s)	FTEs	
Year	1:	PKBASE-OT	ADM		1.00	0.1	
Year	2:	PKBASE-OT	ADM	,	1.00	0.1	
Year	3:	PKBASE-OT	ADM		1.00	0.1	
Year	4:	PKBASE-OT	ADM		1.00	0.1	
		, .	Total:		4.00	0.4	
		Source	Act Type			FTEs	
Year	1:	NR-I&M	ADM	4	49.00	0.9	

	PROJECT	STATEMENT SH	PERI-N-01 IEET PS Page:	
Year 2:	NR-I&M	ADM	49.00	0.9
Year 3:	NR-I&M	ADM	49.00	0.9
Year 4:	NR-I&M	ADM	49.00	0.9
		Total:	196.00	3.6

(OPTIONAL) ALTERNATIVE ACTIONS/SOLUTIONS AND IMPACTS: N/A

COMPLIANCE CODE(s): EXCL

EXPLANATION: 516 DM2 App. 2, 1.1

### CULTURAL RESOURCE DOCUMENTATION CHECKLIST

Place an X in the appropriate column. Leave columns blank if document is not required for the park. Remember that items in the first section, <u>PLANNING DOCUMENTS</u>, may also apply to natural resources. See NPS-28, Chapter 2 for description of each inventory or study.

TITLE	CURRENT AND APPROVED	INCOMPLETE; NEEDS REVISION OR UPDATING	NEEDED
PLANNING DOCUMENTS			
Preauthorization and Authorization			
Statement for Management (SFM)	/		
Outline of Planning Requirements (OPR)	/		
General Management Plan (GMP)			1
Development Concept Plan (DCP)		V	
Resources Management Plan (RMP)		. /	
Interpretive Prospectus (IP)	/		
SERVICEWIDE INVENTORIES, LISTS, CATALOGS, AND REGISTERS			
Cultural Resources Bibliography (CRBIB)	/		
Cultural Sites Inventory (CSI)	/		
List of Classified Structures (LCS)	\ \		
National Catalog of Museum Objects		/	
National Register of Historic Places	/		
BASIC CULTURAL RESOURCE DOCUMENTS			
Archeological Overview and Assessment			1
Archeological Identification Studies			-
Archeological Evaluation Studies			/



### CULTURAL RESOURCE DOCUMENTATION CHECKLIST

TITLE	CURRENT AND APPROVED	INCOMPLETE; NEEDS REVISION OR UPDATING	NEEDED
BASIC CULTURAL RESOURCE DOCUMENTS (cont.)			
Ethnographic Overview & Assessment			<u>/</u>
Ethnographic Oral Histories & Life Histories			
Ethnographic Program			
Historical Base Map			ļ
Historic Resource Study (HRS)			ļ
Park Administrative History		<u>/</u>	
Scope of Collection Statement			ļ
SPECIAL RESOURCE STUDIES AND PLANS			
Archeological & Ethno. Collections Studies	<del> </del>	-	
Archeological Data Recovery Studies		-	
Collection Management Plan		<u> </u>	
Collection Storage Plan			/
Collection Condition Survey		<del></del>	
Cultural Landscape Report (CLR)	/		
Ethnohistory		· · · · · · · · · · · · · · · · · · ·	
Exhibit Plan			
Historic Furnishings Report	/		ļ
Historic Structure Preservation Guide (HSPG)			/
Historic Structure Report	/		_
Social Impact Study			
Special History Study		Į	1/
Traditional Use Study	/		_



# SUMMARY CHART FOR ARCHEOLOGICAL SITES

Significance	ance			Condition	_			Impacts	acts		<b>6</b>	Documentation	Hon
		Good	Tag.	Poor	Destroyed	Unknown	Severe	Moderate	Low	Unknown	Good	Fair	Poor
National												·	
State &													
l.ocal					·								·
Hot Evaluated	8		(I)						W			W	-
IOTALS	8		W						જ			η)	

## SUMMARY CHART FOR STRUCTURES

Mational	Glooffe	. 924		Con	Condition			Impacts	st:		8	Documentation	ation
Good Fair Poor Unknown Severe Moderate Low Unknown Good Fair Poor Unknown Good Fair Poor Living												7	Poor
National         /<			Good	T T	Poor	Unknown	Severe	Moderate	Low	Crknown	800 800	i L	3
National         /<													
State & Regional Local Not Evaluated TOTALS	National			`				`					
State & State		,											
Local Not Evaluated TOTALS	State &												
Local Not Evaluated TOTALS	Regional												
Not Evaluated TOTALS				نسد نيسب									
Not Evaluated TOTALS	Local												
Evaluated TOTALS	Not												
TOTALS	Evaluated												
TOTALS		`			المستدرين								
	TOTALS												

### SUMMARY CHART FOR OBJECTS

Village County

DOCUMENTATION  Town 10 254 Submitted to National Catalog	Archeology	Ethnology	History	Archives	Biology	Paleontology Geology	Geology	TOTALS
Herper's Ferry . agistration Data Only								
Registration & Catalog	35		371	53				454
Total Items Cataloged	35		37/	53	•			65h
Backlog to be Cataloged a. 1,500	a. 1,500			·		·		005'1
Total Collection Summary	1,535		37,	10				1,955
							•	

CONDITION The percentage of confection in the following	Archeology	Ethnology	History	Archives	Biology	Paleontology	Geology
Excellent							
Good	6/		20%	`			
Fair	60		60%	100%			
Poor	825		\$ 0.5 8				
Unknown				,			
				A			

SUMMARY CHART FOR CULTURAL LANDSCAPES

Significance	nce		Condition	lition			Impacts	ş		0	Documentation	uoita 
		0	iea	Poor	Unknown	Severe	Moderate	Low	Unknown	Good	Fair	Poor
		8	E 6									
National							•					
State &												
Regional												
Local												
Not		~					_			/		
Evaluated	_	-										
	~	~				· ·	~			/		·
TOTALS	\	-										

### List of Completed Plans Related to the Resources Management Plan

Vegetation Treatment Plan Development Concept Plan Wildland Fire Management Plan

### CY 1992 Summary Status Report Resources Management Plan

C-001: the park, Williamsport Training Center, and SWR-RCC developed a training course for the preservation of historic structures. This course is to be held at the Elkhorn Tavern in April 1993, and will concentrate on painting difficult-to-paint surfaces and replacement of historical roofing.

C-002: the collection was moved from the A/V room above the auditorium to a space underneath the A/V room. This new space is dedicated to the collection. A safe was purchased for the firearms collection; this safe was placed in the common room due to lack of space in the collection storage area.

C-003: no activity.

C-004: the Winton Spring house was surveyed in accordance with the SHPO's procedures. A full Section 106 consultation was processed, and the SHPO and Advisory Council concurred with NPS plans to remove the structure. SWR-RCH developed a MOU with the SHPO and Advisory Council; the MOU was signed by all parties in January 1993.

C-005: lines overhead to the Winton Spring house were removed by the local power company at the park's request. Telephone cable boxes no longer in use were removed by the phone company at the park's request.

C-006: repainting of two cannons at the Leetown battlefield and two cannons at the Elkhorn Tavern were begun. The Interpretive staff conducted a survey of missing carriage parts, and procured and began installing them. Four concrete cannon pads at tour stop 11 were removed to mitigate an adverse impact to the historic scene. Sections of rail fence were repaired/replaced, especially at the Elkhorn Tavern.

C-007: a non-historic rail fence was removed along Highway 72 in the northwest part of the park. Park staff held discussions on how to implement other portions of the Vegetation Treatment Plan, including changes in the mowing cycle. Implementation is currently held up due to the work on the tour road.

C-008: the Park Ranger (History) completed the following research projects: Butterfield/Overland Mail Route; Union-Confederate Burial Locations; Cox Family; Mountain Howitzer; Interpretive Tour Tape. Park decided that the Administrative and Legislative Histories were beyond the capability of the park to complete.

C-009: 10-238 was produced.

C-010: 10-238 was produced.

C-011: park held discussions with the SHPO and the State Highway Department regarding rerouting of Highway 62 and use of ISTEA funds for enhancement of the visitor experience at Pea Ridge NMP.

C-012: new project, no activity; 10-238 placed on Work Plan.

C-013: new project; staff discussions of alternatives and safety issues.

C-014: new project; park established CRM responsibilities on a more formal basis (Position Descriptions and collateral duty assignments).

C-015: new project, no activity; placed on Work Plan.

N-001: no activity.

N-002: no activity.

N-003: old number - no project.

N-004: no activity.

N-005: no activity.

N-006: north half of prairie plot mowed.

N-007: park treated for Apple and Cedar rust, and for ticks. Some rail fence areas treated to retard grass growth underneath. Dr. Jerrel Singleton, from the University of Arkansas, conducted park tick population studies.

N-008: several loose pets roaming the park were taken to a local veterinarian.

N-009: several eroded areas in lease fields were filled with soil.

N-010: many hazardous trees in low-use zones were removed or trimmed. Hazardous trees in high use areas were also removed or trimmed, especially at the picnic area and the Elkhorn Tavern.

N-011: some noxious weeds were removed by hand.

N-012: new project, no activity.

N-013: new project, no activity.

N-014: two slash pile reduction burns were conducted.

N-015: new project, no activity other than preliminary staff discussions.

N-016: new project, no activity.

N-017: new project, no activity.

N-018: new project, no activity.

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